PORTFOLIO BEST VIEWED IN “BOOKS” APP ON AN IPAD

OR

ADOBE ACROBAT ON A SURFACE PRO

Disney

www.brentzorich.com

BRENT J. ZORICH MA BSID Startup Level Chief Visual Officer Worldwide Published Tech Entrepreneur contact: linkedin.com/in/brentzorich

A 2023 COLLECTION OF PROFESSIONAL WORK ::::: NAMED "ONE OF THE TOP 100 PEOPLE IN TECHNOLOGY WORLDWIDE" BY THE INTERCON CONFERENCE SPONSORED BY FACEBOOK AND AMAZON

..... SAMPLE OF FILM GAME CONVERGENCE SHOWN TO GEORGE LUCAS

JANGO FETT FROM STAR WARS EPISODE II: ATTACK OF THE CLONES CONVERGED WITH LUCASFILM ANIMATION'S AHSOKA TANO ON THE XBOX.

REDESIGNED MADDEN NFL RIGGING SYSTEM

CLONE WARS OBI WAN COLOR CORRECTION

SONY PICTURES RIG PROTOTYPING:
80 HOURS OF RIGGING IN 20 MINUTES

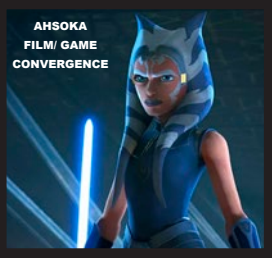
DISNEY RIGGING RESEARCH AND DEVELOPMENT

BOBA FETT IN THE FORCE UNLEASHED

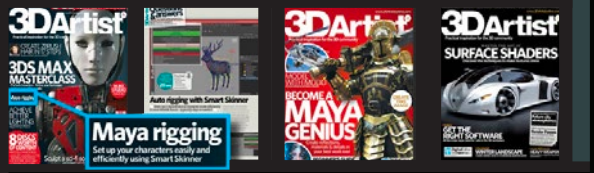
ARCHITECTURE AT THE #1 FIRM WORLDWIDE

JANGO FETT
FILM/ GAME
CONVERGENCE

ADOBE PRE RELEASE TEAM
FOR THE APPLE IPAD



AHSOKA
FILM/ GAME
CONVERGENCE

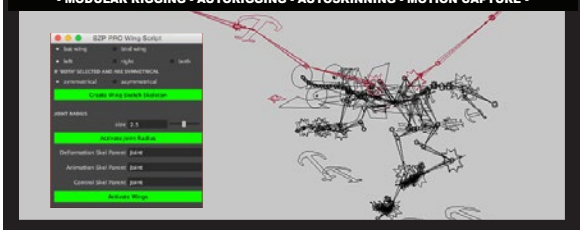


THREE WORLDWIDE MAGAZINES (COVER STORY, BZP PRO SOFTWARE ON DISC, BIOGRAPHY)

FIRST ENTREPRENEURIAL VENTURE: MY SOFTWARE COMPANY: BZP PRO

(OUT PENETRATING FACEBOOK LLC IN UNIVERSITY ACCEPTANCE PRE ANGEL INV.)

- SIGGRAPH AND GDC BOOTHS - QUOTED BY SIGGRAPH CHAIR AS 'MINDBLOWING' -
- ADVISED BY ILM FOUNDER AFFILIATE TO NOT SELL BELOW 20 MILLION -
- MODULAR RIGGING - AUTORIGGING - AUTOSKINNING - MOTION CAPTURE -



SECOND ENTREPRENEURIAL VENTURE:
MY CLOTHING COMPANY:
"SKETCHES OF BRENT ZORICH"
APPROACHED BY THE MARKETING FIRM OF 'GQ' & 'VOGUE'

SEEN ON .....

DREAMWORKS ANIMATION SKG
OUTREACH PROGRAM

Adobe

Stanford University
CONT' STUDIES
ENGINEERING

Disney

EA

2K

Discovery

nbbj
ARCH FIRM
RANKED MOST
INNOVATIVE
WORLDWIDE

Gensler
ARCH FIRM
RANKED #1
WORLDWIDE

SONY

Reebok

OHIO STATE
INDUSTRIAL
DESIGN

BZP PRO
ENTREPRENEUR

Sketches of Brent Zorich
ENTREPRENEUR

ACCAD
WHERE CGI
WAS INVENTED

LUCASFILM Ltd

- EXECUTIVE TRAINEE -
- BEST PRACTICES COMMITTEE -
- SKYWALKER RANCH ALUM -
- SPIELBERG PROJECT ALUM -
- WORK SHOWN TO GEORGE LUCAS -

As a potential future chief visual officer… reflections:

- **What is the top design firm in the world:** Gensler… **achieved**
- **What is the largest console video game company in the world and their largest title:** EA Sports and Madden NFL… **achieved**
- **What is considered to be the top entertainment company in the world with the strongest IP:** Lucasfilm (executive trainee, best practices steering committee selected by the right hand person of Peter Jackson, work approved directly by George Lucas, who, in the history of entertainment, the only person as recognized artistically as him is Walt Disney himself)… **achieved**
- **Name several of the more difficult affiliations/ companies to acquire on your resume in entertainment:** Disney, Sony, DreamWorks, Take Two, Marvel… **achieved**
- **What is the design firm that got named most innovative design firm in the world:** NBBJ… **achieved**
- **Name a startup that out penetrated Facebook LLC Pre "Series A" in regards to university penetration:** BZP Pro (cofounder)… **achieved**
- **Name someone who develops pioneering technology featured on the cover of a worldwide magazine, so advanced yet so user friendly that the Siggraph Chair, who is one of the most respected in graphics, refers to him as mind blowing publicly:** Brent J. Zorich… **achieved**
- **Name one of the top 100 people on the planet in technology as recognized by a conference sponsored by Facebook LLC and Amazon:** Brent J. Zorich… **achieved**
- **Name someone who has working knowledge and comprehension of Stanford Level Engineering, ILM R and D, and ILM Block Party Rigging Software, as applies to CGI:** Brent J. Zorich… **achieved**
- **Who was advised to not go below 20 million on an acquisition review brokered by Goldman Sachs by one of the people who is the affiliate of one of the founders of ILM:** BZP Pro… **achieved**
- **Who was contacted by the PR specialist of Michael Jackson, one of the top PR specialists in the industry who has 19 books out and lectures at Harvard, to represent him publicly:** Brent J. Zorich… **achieved**

So the question is… if Leonardo da Vinci (Artist, Architect, Industrial Designer, Engineer) were alive today, would he be able to state these facts….. probably not.

PREAMBLE

GOAL:

TO MAKE FURTHER ADVANCEMENTS IN THE FIELD OF DESIGN ENGINEERING THAT ARE PRIMARILY FOCUSED ON INNOVATION OF ANIMATION SYSTEMS USED IN FILM GAME CONVERGENCE (EXAMPLE: CREATING ONE 'SPIDER-MAN' CHARACTER ASSET THAT CAN BE USED AT BOTH 'SONY PICTURES' IN FILM AS WELL AS THE 'PLAYSTATION 5' IN GAME- USING SAME ANIMATION DATA BETWEEN BOTH DIVISIONS AND CUTTING COSTS. THIS WILL BE ACHIEVED BY CONTINUING AS A TECH ENTREPRENEUR, A FASHION ENTREPRENEUR, AND BECOMING AN EVENTUAL 'CHIEF VISUAL OFFICER' AT A MAJOR COMPUTER GRAPHICS STUDIO. RANGE FOR A POSITION LIKE THIS AT A MAJOR FIRM CAN REACH UP TO 600K TO 800K BASE, WITH 1 TO 2 MILLION BONUS, AND 3 TO 7 MILLION IN STOCK. IN 2009 AT LUCASFILM, MY EARNINGS WERE PROJECTED THAT YEAR TO BE $170,000. THIS IS PRIOR TO HAVING MY OWN SIGGRAPH AND GDC BOOTH; INFLATION; DESIGNING GROUNDBREAKING TECHNOLOGY THAT THE TOP PERSON IN COMPUTER GRAPHICS REFERS TO AS 'MIND BLOWING' PUBLICLY; GETTING ON THE COVER OF WORLDWIDE MAGAZINES WITH GLOWING WORLDWIDE REVIEWS FOR MY TECHNOLOGY BY HEAD PEOPLE OF OSCAR WINNING VISUAL EFFECTS STUDIOS; BEING ADVISED TO NOT SELL THE TECHNOLOGY THAT I'VE WRITTEN IN ACQUISITION, HAVING FIVE REVIEWS WITH THREE FORTUNE 500S, FOR NOT UNDER TWENTY MILLION DOLLARS; DESIGNING A FREEMIUM MARKETING STRATEGY THAT OUT PENETRATES BILLIONAIRE MARK ZUCKERBERG PRE ANGEL INVESTMENT IN UNIVERSITY PENETRATION; LAUNCHING A CLOTHING LINE WITH CONCEPTS SO AMAZING THAT I AM APPROACHED BY INTERNATIONAL MARKETING FIRMS WANTING TO PUT THE CLOTHING LINE IN BOTH 'GQ' MAGAZINE AND 'VOGUE' MAGAZINE; PROJECTED BY A PR FIRM REPRENETING GOOGLE, DISNEY, FACEBOOK, AND AMAZON, THAT THE CLOTHING LINE, DUE TO QUALITY OF THE DRAWINGS, WILL EARN AN EVENTUAL $500,000 A MONTH IN REVENUE; RESPECTED AS AN ENTREPRENEUR SO MUCH SO THAT A NATIONAL PR FIRM RAN AN INTERNATIONAL STORY ABOUT ME IN THE WALL STREET JOURNAL'S MARKET WATCH; AND SO BIG IN THE TECH ENTREPRENEUR WORLD THAT MICHAEL JACKSON'S PUBLIC RELATIONS SPECIALIST CONTACTED ABOUT REPRESENTING ME. THE REQUESTED POSITION AND PRICE ON THAT POSITION OF CHIEF VISUAL OFFICER IS CORRECT. THIS POSITION REQUIRES EXPERIENCE WITH MODELING, ANIMATION, RIGGING, LIGHTING, CONCEPT, DIGITAL ARCHITECTURE, MASS MARKETING, RETAIL KIOSK DESIGN, RETAIL ARCHITECTURE, AND WEB DEVELOPMENT. I AM HYPOTHESIZING THAT BASED ON THIS RESUME, MY VALUE TO A MAJOR VIDEO GAME ORGANIZATION LIKE XBOX, PLAYSTATION, WARNER BROS INTERACTIVE, ELECTRONIC ARTS, ILM, OR TAKE TWO INTERACTIVE, IS UP TO 1/4 TO 1/2 THAT OF THE CEO OF ELECTRONIC ARTS WHO IN 2021 EARNED 40 MILLION DOLLARS COLLECTIVELY FROM SALARY, STOCK, AND BONUS.

TWO PAGE RESUME

BRENT J. ZORICH MA BSID

Startup Level Chief Visual Officer | Worldwide Published Tech Entrepreneur | contact: linkedin.com/in/brentzorich

SKILLSET OFFERED TO A VIDEO GAME COMPANY: A DIGITAL CRAFTSMANSHIP THAT CAN CREATE RIGGING TECHNOLOGY VALUED AT 20 MILLION IN ACQUISITION REVIEWS AND CONCEPT DESIGNS PROJECTED AT 6 MILLION/ YEAR WHEN LICENSED. (26 MILLION IN VALUE IN ONE YEAR).

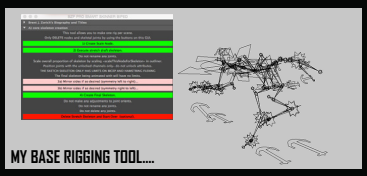
DESIGNED CREATIVE 'CASH COWS' (TWO VENTURES) THAT HAVE A POTENTIAL ROI IN THEIR ACQUISITIONS OF OVER 20 MILLION WITH AN ANNUAL BURN OF ONLY $2200.00. THESE E-COMMERCE 'CASH COWS' REQUIRE LITTLE TO NO MAINTENANCE.

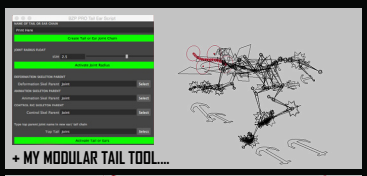
1ST ENTREPRENEURIAL VENTURE

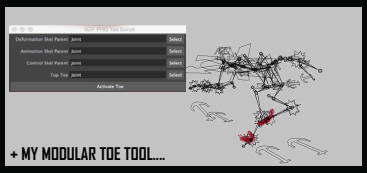
"BZP PRO (AUTODESK AUTH DEVELOPER)"

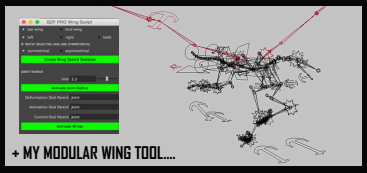
(2011-CURRENT):

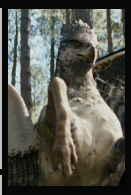
PRODUCT: "THE SMART SKINNER" RIGGING PLUG-IN FOR MAYA- MOTION CAPTURE ▪ FBX SCENE OPTIMIZER ▪ POSE SPACE LIBRARY ▪ PIPELINE & WORKFLOW ▪ ILM MODULAR RIGGING ▪ AUTOSKINNING ▪ ILM CONTROL RIG. E-COMMERCE: $299.99. FINANCIALS: 20 MILLION VALUATION BY THE HOTH SUPERVISOR'S PARTNER ON 'THE EMPIRE STRIKES BACK.' (5 ACQUISITION REVIEWS, 3 FORTUNE 500S). ANNUAL BURN: $1500.00. (PLUG-IN MAINTENANCE). MEDIA: THREE WORLDWIDE MAGAZINES.


MY BASE RIGGING TOOL....


+ MY MODULAR TAIL TOOL....


+ MY MODULAR TOE TOOL....

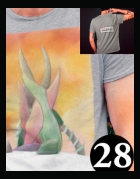

+ MY MODULAR WING TOOL....

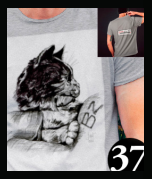


MODULAR RIGGING DESIGN ENGINEERING (THIS CASE STUDY SHOWN ON BUCKBEAK FROM 'HARRY POTTER AND THE PRISONER OF AZKABAN') WITH 1ST VENTURE SOFTWARE I AUTHORED: 90 HOURS OF ILM LEVEL WORK COMPLETED IN 5 MINUTES.

2ND ENTREPRENEURIAL VENTURE "SKETCHES OF BRENT ZORICH"

(2021-CURRENT): PRODUCT: PRINT ON DEMAND CLOTHING LINE. E-COMMERCE: VIDEO GAME CONCEPT DRAWINGS FOR SALE- OVER 50 T-SHIRTS @ $38.00, OVER 20 HOODIES @ $56.00, OVER 40 PRINTS @ $28.00. (WWW.SKETCHESOFBRENTZORICH.COM) FINANCIALS: PROJECTIONS OF 6 MILLION PER YEAR FROM THE MARKETING FIRM REPRESENTING GOOGLE, FACEBOOK, MCDONALD'S, AMAZON, AND DISNEY (CHMW). ANNUAL BURN: $700.00. ($600.00 SHOPIFY, $100.00 WEBSITE MAINTENANCE). MEDIA: FEATURED IN WALL STREET JOURNAL 'MARKET WATCH,' PRESS INQUERY FROM 'GQ' AND 'VOGUE' MAGAZINE.





ENDORSEMENT FOR THE 1ST VENTURE

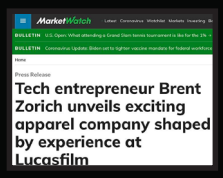
FROM ONE OF THE MOST RESPECTED IN THE ANIMATION INDUSTRY (THE SIGGRAPH CHAIR) PUBLICLY REFERRING TO MY TECH AS "MINDBLOWING" ON TWITTER.

MY TECHNOLOGY FEATURED @ MY BOOTHS @ SIGGRAPH & GDC

2ND VENTURE FEATURE

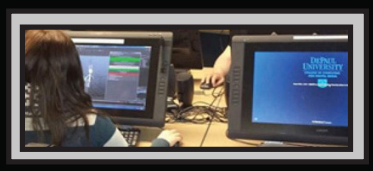
"THE WALL STREET JOURNAL"

(MARKET WATCH)



MY 1ST VENTURE'S TECHNOLOGY IN THE CLASSROOM

(250 UNIVERSITIES ON 6 CONTINENTS RECEIVED PRODUCT) NOTE: SOPHOMORES IN COLLEGE ARE ABLE TO RIG CHARACTERS AT THE LEVEL OF ILM DUE TO MY TECH.



THREE WORLDWIDE MAGAZINES FEATURING MY BIOGRAPHY AND 1ST VENTURE

WORLDWIDE 2 PAGE BIOGRAPHY

1ST VENTURE DESIGNS ARE ON A WORLDWIDE MAGAZINE'S ACCOMPANYING DISC

1ST VENTURE DESIGNS ARE A WORLDWIDE COVER FEATURE

ADDITIONAL ENTREPRENEURIAL INFORMATION

PERSONAL FINANCIAL DESIGN	(TEN MONETIZED ENTITIES BASED ON FINANCIAL AND COMPUTER GRAPHICS INDUSTRIES GENERATING WEALTH INDEFINITELY WITH NO MAINTENANCE) '22-CURRENT
VOXX STUDIOS RIGGING PROTOTYPING	(NDA RIGGING WORK FOR TV SHOW PITCH VIA VITRUVIAN ENTERTAINMENT) '20
ADOBE, INC. PRE RELEASE TEAM	(PHOTOSHOP QA TESTING TEAM FOR APPLE'S IPAD PRO 2; GETTING ADVANCED COPIES AND TESTING ON BETA SOFTWARE) '19-CURRENT
DRA (DESIGN REPLACES ART) SOFTWARE ARCHITECT	(TECHNOLOGY THAT ENHANCES A CONCEPT ARTIST'S ABILITY TO DESIGN CHARACTERS FROM SALES METRICS, NOT RANDOMIZATION) '19-CURRENT
WALT DISNEY FEATURE ANIMATION RIGGING PROTOTYPING USING MY BZP PRO SOFTWARE	(INCORPORATING MOTION CAPTURE HIK TO DISNEY FEATURE RIGS FOR "PROOF OF CONCEPT"- TESTED ON DISNEY'S **"VAMPIRINA"** AND **"T.O.T.S."**) '19
SONY PICTURES ENTERTAINMENT RIGGING PROTOTYPING USING MY BZP PRO SOFTWARE	(DAVID BAUTISTA FROM **"GUARDIANS OF THE GALAXY VOL 2"** AND 240 HOURS OF ILM LEVEL RIGGING COMPLETED IN 70 MINUTES) '17

- MADE SUCH ENORMOUS STRIDES AS AN ENTREPRENEUR THAT MICHAEL JACKSON'S PR CONTACTED ABOUT PERSONALLY REPRESENTING ME.
- DUE TO NAME AND GLOBAL REPUTATION, RALPH LAUREN'S CLOTHING MANUFACTURER IN CHINA HAS CONTACTED ABOUT PRODUCTION OF THE 2ND VENTURE.
- LECTURED AT OVER 40 UNIVERSITIES SHOWCASING BZP TECHNOLOGY.
- BZP FEATURED ON THE COVER OF A WORLDWIDE MAGAZINE FOR TECH I WROTE MYSELF IN MEL AND PYTHON.
- 250 UNIVERSITIES ON 6 CONTINENTS WERE LICENSED MY AUTORIGGER IN 6 MONTHS AT A PACE OUT PENETRATING FACEBOOK LLC'S FREEMIUM MODEL IN UNIVERSITY ACCEPTANCE PRE ANGEL INVESTMENT.
- INTERVIEW, SCREEN, AND NEGOTIATE WITH VENTURE CAPITAL FIRMS FOR BZP EQUITY INCLUDING THE FIRM OF KEVIN O'LEARY (ABC'S SHARK TANK): RAISED INVESTMENT MONEY FOR BZP FROM BANKING ALUM OF HARVARD AND YALE.
- NOTE: MY 1ST VENTURE HAS BEEN UNDER ACQUISITION REVIEW FIVE TIMES WITH THREE SEPARATE FORTUNE 500 COMPANIES VALUED AT 20 MILLION DUE TO TECHNOLOGY I WROTE ENTIRELY MYSELF AND BROKERED BY GOLDMAN SACHS ALUM FROM HARVARD. MY 2ND VENTURE HAS PROJECTIONS OF 6 MILLION PER YEAR FROM THE PR FIRM OF GOOGLE, FACEBOOK, AMAZON, AND DISNEY ONCE PROPERLY MARKETED.

SOFTWARE EXPERIENCE

MAYA (MASTER LEVEL OF EXPERIENCE), MOTION BUILDER, MEL, PYTHON, PHOTOSHOP, ZENO (ILM'S SOFTWARE), AFTER EFFECTS, FINAL CUT, VRML, PIXAR'S RENDERMAN, SLIM, HTML, C++, HIK CUSTOMIZATION AND AUTOMATION FOR MOTION CAPTURE

EDUCATION & AWARDS

- **BSID:** BACHELOR OF SCIENCE INDUSTRIAL DESIGN AT **THE OHIO STATE UNIVERSITY: 1998**
  SENIOR THESIS CLIENT: **NIKE** - PRODUCT INVENTION AND CEO PITCH: **REEBOK**
- **MA:** MASTERS OF ARTS AT THE ADVANCED COMPUTING CENTER FOR THE ARTS AND DESIGN (ACCAD) AT **THE OHIO STATE UNIVERSITY: 2011**
  GRADUATE ACADEMIC ADVISOR FOUNDER AND FORMER HEAD OF THE COMPUTER ANIMATION DIVISION AT **RINGLING SCHOOL OF ART & DESIGN**
- **CONTINUING STUDIES** SPECIALIZING IN LINEAR ALGEBRA AND ENGINEERING AT **STANFORD UNIVERSITY: 2020**
- AWARDED **"ONE OF THE TOP 100 PEOPLE IN TECHNOLOGY AND INNOVATION"** ACCORDING TO THE INTERCON CONFERENCE SPONSORED BY **FACEBOOK** & **AMAZON**.
- MEMBER OF **SIGMA ALPHA EPSILON** FRATERNITY (THE NATION'S LARGEST FRATERNITY)

FINANCIAL GROWTH STRATEGY: THE 10 "CASH COWS": 6 DIGIT POTENTIAL EARNINGS IN PASSIVE INCOME

2 MONETIZED WEBSITES SELLING CLOTHING ▪ 3 SIX DIGIT DIVERSIFIED BROKERAGES ▪ AGGRESSIVE SIX DIGIT INVESTED IRA ▪ AGGRESSIVE STOCK FUND ▪ BZP PRO CITY BUILDER TOOL ▪ 'STASH' INDEPENDENT STOCK INVESTMENTS ▪ 'FUNDRISE' REAL ESTATE INVESTMENTS

THE OHIO STATE UNIVERSITY 2010-2011

COMPLETED INCOMPLETE MASTERS DEGREE FOCUSING ON DINOSAUR PYTHON AUTORIGGING

LUCASFILM, LTD. 2008-2009

SENIOR TECHNICAL ARTIST (CORPORATE EXECUTIVE TRAINEE - BEST PRACTICES STEERING COMMITTEE)

"STAR WARS THE FORCE UNLEASHED ULTIMATE SITH EDITION"	(LEAD CHARACTER TECHNICAL CONSTRUCTION AND SUBMITTED CONCEPT ARTWORK)
"INDIANA JONES AND THE STAFF OF KINGS"	(CHARACTER TECHNICAL CONSTRUCTION AND CHARACTER DEFORMATION R & D)- **A STEVEN SPIELBERG PROJECT**
"STAR WARS THE CLONE WARS: SEASON TWO"	(COLOR CORRECTION & COMPOSITING ON TWO EPISODES FEATURING CAD BANE AND OBI-WAN KENOBI)- SHOWN AT ANNUAL FIRM WIDE MEETING)
"TRANSFORMERS REVENGE OF THE FALLEN"	(SHOT APPROVAL IN DAILIES AT WEEKLY INDUSTRIAL LIGHT & MAGIC CREATURE R & D MEETINGS FEATURING OPTIMUS PRIME AND DEVASTATOR)
"STAR WARS THE FORCE UNLEASHED II"	(INITIAL KICKOFFS, SHARED ASSETS, FILE MANAGEMENT, CHARACTER TECHNICAL CONSTRUCTION RESEARCH AND DEVELOPMENT)
"HARRY POTTER AND THE HALF BLOOD PRINCE"	(SHOT PREP FOR MONTHLIES APPROVED BY THE HEAD OF ILM SINGAPORE- SHOTS INCLUDE HARRY POTTER AND PROF DUMBLEDORE)

- **KEY ACHIEVEMENT: DUE TO BEING ONE OF THE TOP PEOPLE IN THE TOP COMPANY IN COMPUTER ANIMATION/ GRAPHICS/ AND VIDEO GAMES, RELOCATED FROM SINGAPORE TO SAN FRANCISCO AFTER FIVE MONTHS.**
- INVITED BY THE DIRECTOR OF ANIMATION TECHNOLOGY, FORMER CTO OF PETER JACKSON'S WETA DIGITAL (LORD OF THE RINGS), TO BE ON THE STEERING COMMITTEE SETTING "BEST PRACTICES" FOR LUCASARTS, LUCASFILM ANIMATION, AND ILM.
- INVITED TO THE PRESTIGIOUS SKYWALKER RANCH ON NUMEROUS OCCASIONS TO OBTAIN EXTENSIVE RESEARCH THAT WAS INCORPORATED INTO CHARACTERS BOBA FETT AND JABBA THE HUTT.
- CONVERGED THE EMMY AWARD WINNING FILM AHSOKA TANO WITH ILM'S OSCAR NOMINATED JANGO FETT INTO AN OPTIMISED CHARACTER WORKING IN THE UNREAL ENGINE THAT WAS APPROVED DIRECTLY BY MR. GEORGE LUCAS IN SINGAPORE.
- REFERRED TO BY THE PROJECT MANAGER ON THE FILM GAME CONVERGENCE CREW IN SINGAPORE, WHO WAS A TEN YEAR SONY VETERAN AND HAD WORKED IN GAMES SINCE THE 1980'S, AS THE "TOP RIGGER" IN THE INDUSTRY.
- DUE TO THE ASTONISHMENT ON THE SINGAPORE FLOOR OF THE TECHNICAL TEAM AFTER I TECHNICALLY CONSTRUCTED ONE OF MY CONVERGENCE RIGS, I BEGAN TO BE REFERRED TO ON THE FLOOR AS "GOD."
- CHARACTER EXPLORATION, DOCUMENTATION, AND BENCHMARKING, OF STAR WARS IP RIGGING ASSETS SUCH AS GENERAL GRIEVOUS, THE EMPEROR, AHSOKA TANO, KIT FISTO, LORD VADER, AND ANAKIN SKYWALKER, IN SINGAPORE.
- QUALITY ASSURANCE, ANIMATION CYCLE TESTING, EXPLORATION, AND TECHNICAL DOCUMENTATION ON STANDARD ILM BIPED, QUADRUPED, AND WINGED CHARACTERS IN SINGAPORE.
- INVITED INTO HIGHLY COVETED CREATURE RESEARCH AND DEVELOPMENT MEETINGS AT INDUSTRIAL LIGHT & MAGIC AFTER DEMONSTRATING TECHNICAL ABILITY TO ILM DEPARTMENT SUPERVISOR.
- ADMITTED INTO LUCASFILM EXECUTIVE TRAINING VIA ENGAGED LEADERSHIP LLC AFTER PROVING STRONG LEADERSHIP QUALITIES FOR THE TEAM. I WENT THROUGH EXEC TRAINING BEFORE MY OWN MANAGER.
- THE PRESIDENT OF LUCASARTS POSITIVELY REVIEWED MY EXECUTIVE PROPOSAL ENTITLED OFFENSIVE ATTACK STRATEGY ABOUT ATTACKING LUCASFILM OPPOSITION AND PASSED IT ON TO THE BOARD OF DIRECTORS.
- EXECUTIVE RECRUITING: AFTER THE FIRM WIDE VIEWING OF QUANTUM OF SOLACE, THE VICE PRESIDENT OF LUCASARTS HAD ME ACCOMPANY HIM TO LUNCH IN SAUSALITO TO ASSIST WITH RECRUITING CORPORATE STAFF OF ELECTRONIC ARTS (FIFA) FOR LUCASFILM.
- ONE OF THE CHARACTERS COMPLETED WITH UNDER MY LEAD TECHNICAL DIRECTION, ULTIMATE EVIL, WAS CHOSEN AS THE COVER OF STAR WARS THE FORCE UNLEASHED, A VERY PRESTIGIOUS HONOR.
- DOCUMENTED AND EXTRACTED KEY ASSETS OF ILM'S RIGGING SOFTWARE, BLOCK PARTY 1, TO DO QUALITY ASSURANCE AGAINST AUTODESK MAYA FOR MULTI DIVISIONAL USAGE.
- AFTER REVIEWING THE LATEST BUILD OF THE XBOX 360 AND PS3 VERSION OF "INDIANA JONES AND THE STAFF OF KINGS", WAS INFLUENTIAL IN THE CANCELATION DUE TO MY THOUGHTS THAT THE FUN FACTOR OF THE WHIP MECHANICS WOULD NOT MATCH "GOD OF WAR."

EA SPORTS (ELECTRONIC ARTS) 2005, 07-08

ASSOCIATE TECHNICAL ARTIST (LEAD RIGGER ON CENTRAL FOOTBALL)

"MADDEN NFL 08"	"NCAA FOOTBALL 08"	(SHOULDER PAD RESEARCH AND DEVELOPMENT. FOOTBALL PLAYER SKINNING)
"EA SPORTS MMA"	"TIGER WOODS PGA 09"	(PROTOTYPE RIG DEVELOPMENT)
"NFL TOUR"	"NFL HEAD COACH 09"	(IN CHARGE OF CHARACTER TECHNICAL CONSTRUCTION FOR ALL CHARACTERS IN TITLE)
"MADDEN NFL 09"	"NCAA FOOTBALL 09"	(REDESIGNED THE RIGGING SYSTEM)
"SUPERMAN RETURNS"		(CHARACTER TECHNICAL CONSTRUCTION OF DRAGON VILLAIN CHARACTER, CITIZEN MODELING, AND MODELING OF LEX LUTHOR'S WARDROBE)
"NBA LIVE 09"	"NHL 09"	(GLOBAL RIGGING GUIDANCE BETWEEN EA ORLANDO AND EAC VANCOUVER'S BODYSHOP) - RIG SWAPPING
"FACEBREAKER"	"FIFA 09"	(GLOBAL RIGGING GUIDANCE BETWEEN EA ORLANDO, EA LONDON, AND EAC VANCOUVER'S BODYSHOP) - RIG SWAPPING
"HARRY POTTER (ORDER OF THE PHOENIX)"		(GLOBAL RIGGING GUIDANCE BETWEEN EA ORLANDO, AND EA LONDON) - RIG SWAPPING

- **KEY ACHIEVEMENT: SALARY INCREASED AFTER ONLY THREE MONTHS WITH LINKEDIN ENDORSEMENTS FROM BOTH MY MANAGER (THE DEV DIRECTOR OF CENTRAL RENDER) AND THE MAIN PRODUCER OF MADDEN NFL.**
- PITCH TO HEADS OF CENTRAL FOOTBALL ABOUT EA SPORTS WORKING WITH NIKE TO COLLABORATE ON BIOMECHANICS AND MOTION CAPTURE AFTER REQUESTED HOW TO IMPROVE THE TEAM.
- REDESIGNED THE FOOTBALL RIGGING SYSTEM BASED ON ANATOMICAL PROPORTIONS AS OPPOSED TO CARTOONY EXAGGERATION THAT USED THE STUDIO CUSTOM QUATERNION NODE AND WAS IMPLEMENTED ON ALL FOOTBALL TITLES GOING FORWARD.
- PARTIALLY DUE TO MY REDESIGNED RIGGING SYSTEM, MADDEN NFL XX (MADDEN NFL 09) RECEIVED THE HIGHEST REVIEWED SCORE (9.1) OF ANY MADDEN OVER THE LAST 20 YEARS ON IGN: SINCE MADDEN NFL 04.
- 10,000 ANIMATIONS (ENTIRE FOOTBALL ANIMATION LIBRARY) RETARGETED TO MY RIGGING SETUP'S REDESIGN ON EA SPORTS TOP GROSSING MULTI BILLION DOLLAR ANNUAL TITLE: MADDEN NFL (CENTRAL FOOTBALL).
- DUE TO THE ART DIRECTORS ON CENTRAL FOOTBALL BEING CONCERNED THAT I WAS GOING TO LEAVE THE STUDIO AFTER ONLY TWO MONTHS DUE TO MY FRUSTRATIONS WITH THE EA ORLANDO LACK OF TECHNICAL KNOWLEDGE, THEY TOOK ME TO LUNCH AND SOLD ME ON STAYING FOR AN ADDITIONAL YEAR; CLAIMING ME TO BE ONE OF THE TOP TALENTS IN ALL OF EA. INQUERIES WERE FROM DREAMWORKS ANIMATION ("HOW TO TRAIN YOUR DRAGON"), RHYTHM & HUES ("THE GOLDEN COMPASS"), AND DIGITAL DOMAIN.
- DUE TO THE REMARKABLE JOB DONE DURING THE SUPERMAN RETURNS INTERNSHIP, MANAGEMENT AWARDED THE TASK OF CREATING LEX LUTHOR'S WARDROBE (THE GAME HERO CHARACTER)- TYPICALLY ASSIGNED TO A SENIOR DIRECTOR.

2K SPORTS (TAKE 2 INTERACTIVE) 2006

CHARACTER TECHNICAL DIRECTOR

"COLLEGE HOOPS 2K7"		(SHOULDER DEFORMATION TWEAKING, CHEERLEADER CHARACTER TECHNICAL CONSTRUCTION)
"COLLEGE HOOPS 2K8"	"NBA 2K8"	(CHARACTER TECHNICAL CONSTRUCTION RESEARCH AND DEVELOPMENT- TESTED ON DATA OF SHAQUILLE O'NEAL)

DREAMWORKS SKG OUTREACH PROGRAM 2005

PARTICIPANT VIA OSU TRAINED BY A COLLECTIVE GROUP FROM SHREK, MADAGASCAR, SHARK TALE, & SPIDER-MAN 2

- **KEY ACHIEVEMENT: SHADOWED THE RIGGING SUPERVISOR THAT TAUGHT ME ABOUT PROXY RIGGING WHO PREVIOUSLY WAS THE RIGGING LEAD ON "FINDING NEMO" AT PIXAR.**

BRAVE NEW PICTURES (THE DISCOVERY CHANNEL) 2003-05

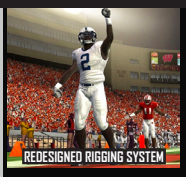
CHARACTER TECHNICAL DIRECTOR/ ANIMATOR/ COMPOSITOR/ MODELLER

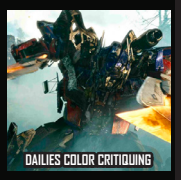
"THE MYSTERY DINOSAUR"	(WORKED WITH PALEONTOLOGIST TEAM THAT ADVISED ON SPIELBERG'S JURASSIC PARK)

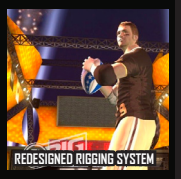
PRIOR WORKED AS AN ARCHITECTURAL DESIGNER AT **GENSLER** (#1 RANKED DESIGN FIRM WORLDWIDE '99-01) AND **NBBJ** (#2 RANKED DESIGN FIRM WORLDWIDE '98-99)

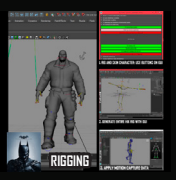
VOLKSWAGEN (DESIGN DEV & CONSTRUCTION DOC) **LINCOLN MERCURY** (DESIGN DEV) **ADIDAS** (STORE AUDITING) **THE REPUBLIC OF CHINA** (DRAFTING)

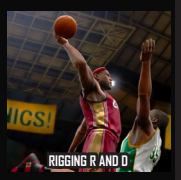
- IN SHADOW CRIT SESSIONS WITH M. ARTHUR GENSLER, THE MOST POWERFUL ARCHITECT ON THE PLANET, PLUS THE CHAIRMAN OF NBBJ, AND A LICENSED GENSLER ARCHITECT THAT WORKED AND STUDIED UNDER FRANK GEHRY.
- CAN APPLY STATIAL DESIGN, ARCHITECTURAL, AND WAYFINDING THEORY TO VIDEO GAME LEVELS/ ENVIRONMENTS THAT WOULD BE APPLICABLE TO CHIEF VISUAL OFFICER OPPORTUNITIES.

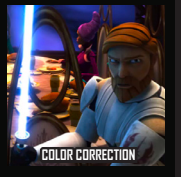


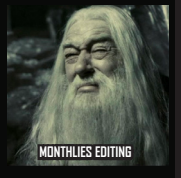


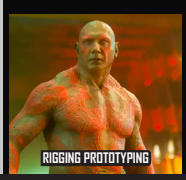


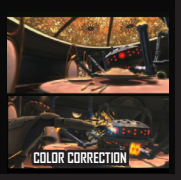












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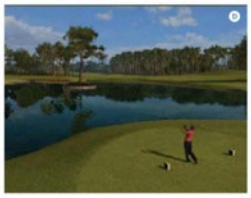
Interview

Industry insider

Brent Zorich

Character technical director, Lucasfilm

Each issue, 3D Artist finds out how the top people in the 3D industry got their jobs and what you need to know to get a foot in the door



About the insider

Job Character technical director/lead rigger
Education Master's of Fine Art at ACCAD at The Ohio State University
Company website www.lucasfilm.com
Personal website www.brentzorich.com
Biography Prior to immersing myself in the animation industry, I had worked for the top two architectural firms in the world. I pride myself on trying to be on a team that does the best work, no matter what project. I push technology as far as I can on whatever team I am affiliated with

There are few people in the 3D industry who can claim to have worked on bestselling EA games titles one year and hung out at Skywalker Ranch with Lucasfilm the next, but Brent Zorich is a man who can. Zorich was part of a steering committee meeting for Lucasfilm on film/game convergence. In addition, he was lead rigger on *The Force Unleashed: Ultimate Sith Edition*. On this title, he was working in the LucasArts division, looking at pipeline and storage optimisation and lead rigging on such characters as Jabba the Hutt and Boba Fett. Zorich was also dealing with convergence on all divisions from Lucasfilm to LucasArts, Lucasfilm Animation, Industrial Light & Magic and Lucasfilm Animation Singapore.

3D Artist: *What did this role of working on convergence mean in practice?*

Brent Zorich: As a part of the senior staff, I wrote proposals to help set the direction for Lucasfilm Ltd as a company. In Singapore, not only was I part of research and development prior to my promotion and relocation to the home office in San Francisco, I also worked on colour correction and compositing for *Star Wars: The Clone Wars*.

3DA: *How did you get this job?*

BZ: I applied online and was hired after Lucasfilm Animation Singapore saw the great work I did on EA Sports' football franchise.

3DA: *What kind of course did you do at university, or training did you do?*

BZ: At ACCAD at the Ohio State University, I did extensive research on the following topics: VRML; procedural animation; Pixar's RenderMan; motion capture. I also researched Wayfinding in real-time simulation (the subject analysed and improved upon was the game *Spider-Man The Movie*).

First of all, the Wayfinding tool was created out of VRML and theories worked on with an eminent scholar. I also studied the enhancement of realism in computer animation through the incorporation of biomechanics and fatigue (the subject analysed was *Shrek*). Next, I looked at rigging of prehistoric animals with my project-based thesis *Mystery Dinosaur* work. Finally, I looked at creatures evolving based on the ecosystem around them. Classes were also taken in digital still-life lighting and theatre lighting.

3DA: *For today's generation of students, what is the kind of educational grounding they should be looking to undertake to get a first job as a character animator, or is the entry level a less specific role?*

BZ: This is the way that I do it. I have a television next to my monitor. I watch *Harry Potter and the Prisoner of Azkaban* (the Buckbeak scene). If I am embarrassed to look at what is on my monitor then I'm not done, plain and simple. I am my own toughest critic and I have zero tolerance.

3DA: *In your role as associate technical artist or lead rigger at EA Sports, what kind of work did that entail?*

BZ: I needed a complete understanding of physiology of humans built for strength and speed. Because I was an athletic trainer who trained football players, it came to me naturally. I know how a football player flexes, I know how they run and sprint and I know how they get prepared for collision. Often, because I have a football player's body, I would go into the washroom at EA where there was a mirror, take off my shirt and flex both my traps and my arms to see the proper deformation. This is how I got into character and what made it so easy is that the character I was getting into was myself!

3DA: *Is there much of a culture or professional working practice difference between working for someone like EA and a company like Lucasfilm?*

BZ: You are who your team is. Lucasfilm, as a company, is a natural fit for me. We both have zero tolerance when it comes to the quality of our work. We push the absolute limitation of technology in every way, shape and form. Because we are not on yearly titles, we have the ability to push back a launch date to guarantee that we are doing our best to break new ground.

3DA: *What software packages and tools have you used for rigging and animation?*

BZ: I use Maya, the proprietary software to Industrial Light & Magic, and After Effects and HyperCam for documentation.

3DA: *Do you think there is a shortage of skilled digital artists doing animation and did you find it difficult getting into the industry?*

BZ: My best advice to any student is try to do an internship in a studio. Do not rush to get out of school; stay in and develop your craft. Finally, do the Buckbeak test as I mentioned above.

3DA: *What are the key skills required to work as a character animator or character rigger?*

BZ: Observation, patience and the goal to push technology. Everything you do, imagine you have to present it to George Lucas. Then you will work harder and will expect the absolute best from yourself and your team.

3DA: *If there was one feature missing from current software apps that you would like to see implemented to help with any aspect of CG animation, what would it be?*

BZ: I saw a demo from a company where you can actually draw arcs of motion on a Wacom tablet and the object will have an animation path.

3DA: *Professionally, what's the most satisfying project you've worked on and why?*

BZ: Seeing my name at the end credits of *Star Wars: The Force Unleashed, Ultimate Sith Edition* makes me incredibly proud. I saw the first *Star Wars* film when I was three in 1977. It motivated my whole career. To see my name in a *Star Wars* product gave me a sense of satisfaction.

3DA: *What would be your dream project to work on?*

BZ: One that continues to push film/game convergence on every level. The ultimate goal for me would be to have an engine that supports a controlled character and the user cannot distinguish between real-time and render.

Portfolio highlights

Zorich has worked on a host of videogames over the years. Feast on these...

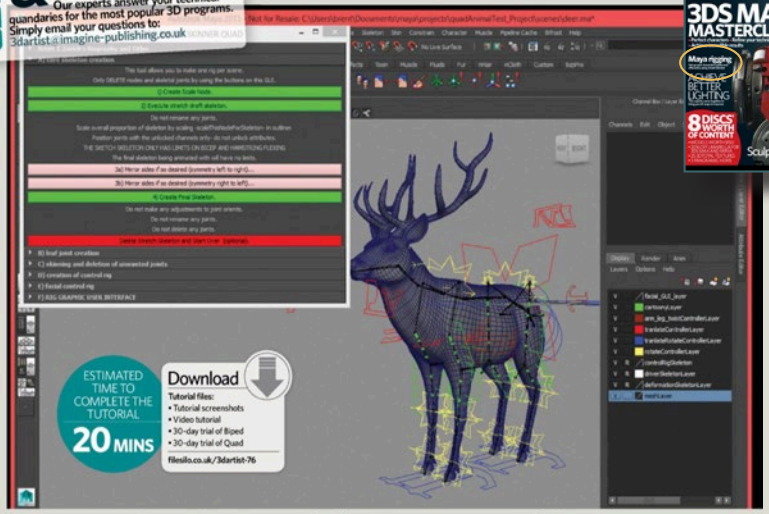
2008-9 *Star Wars: The Force Unleashed, Ultimate Sith Edition*
2008-9 *Indiana Jones and the Staff of Kings*
2008 *Star Wars: The Clone Wars*
2008 *EA Sports MMA*
2007-8 *NFL Tour*
2007-8 *NFL Head Coach 09*
2007-8 *NCAA Football 09*
2007-8 *Madden NFL 09*
2007 *Tiger Woods PGA Tour 09*
2007 *Madden NFL 08*
2007 *NCAA Football 08*
2007 *College Hoops 2K8*
2007 *NBA 2K8*
2006 *College Hoops 2K7*
2005 *Superman Returns: The Videogame*
2003-5 *The Mystery Dinosaur* for The Discovery Channel

A Character rigging on SW Force Unleashed
B Brent at Lucasfilm Animation
C NCAA college football from EA

D Tiger Woods PGA Tour 09
E Character work on NFL Tour
F Indianna Jones and the Staff of Kings
G Artwork from SW: TFU Ultimate Sith edition
H College Hoops 2K7
I The Ultimate Edition in full

3DArtist Questions & answers

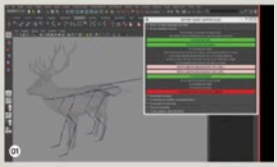
Our experts answer your technical quandaries for the most popular 3D programs. Simply email your questions to: 3dartist@imagine-publishing.co.uk



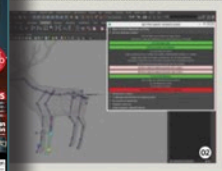
Auto rigging with Smart Skinner

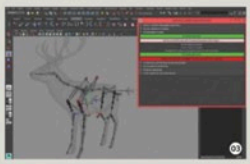
"How can I rig and skin a character more efficiently to save billable hours - typically days or weeks?"

This tutorial is a breakdown of how the Smart Skinner is used in the production environment to save days, if not weeks, on the rigging and skinning process of a character. This step-by-step process goes over the basics of the software and will rig and skin a character of a deer in a matter of minutes. When I worked in production for the biggest companies on the planet, it would not be uncommon that from a billable standpoint, a development director might give me two weeks to start, execute, and complete a rigged character. This caused headaches in the production setting as often I was repeating the same task on different proportions without an effective way of cutting down hours. At Lucasfilm, I was looking through the assets of the main characters such as Ahsoka, Jango Fett and General Grievous extracting their key attributes and incorporating them into a super rig that could be benchmarked for the company. At EA Sports in the late 2000s I designed the rigging system used for Central Football for titles such as *Madden NFL* and *NCAA*. This Smart Skinner software I have written is a culmination of techniques from these top companies incorporated into a tool that is affordable and easy to use. The character will be completed through a process of firstly executing a sketch skeleton to obtain proper proportion. Then, the character will be blocked out within the mesh to ensure the joint positions are in the correct spot. The Smart Skinner will create the leaf helper twist joints to assist with the proper deformation required to make the rig production quality. Then, the animator specifies whether or not he wants the character to be a 'film next-gen character' or a 'mobile character'. From there he will reference in a pipeline that enables auto skinning, transferring the skinning weights, unreference the pipeline skinning file, and making an entire control rig at the push of a button. The end result will deliver a character able to be animated out of the box that is top-of-the-line production quality ready for either film or game.



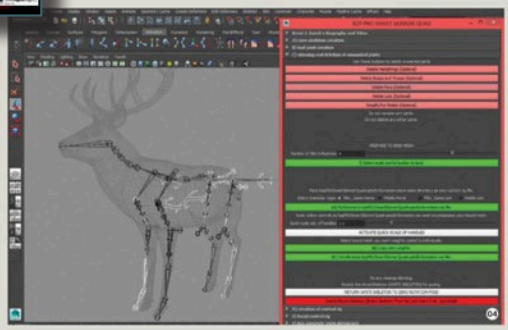
The community at www.3dartistonline.com





Skinning cleanup on the character

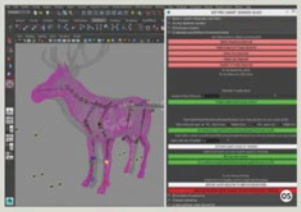
In certain intersections of the character, there will be a need to do skinning cleanup on the joints. The skinner can't predict every deformation. This can be achieved by using the Hammer tool in the skin weighting drop-down in Maya.



rotation down the limbs for proper deformation. The animator can use the white anchor controls to assist in the orientation of the joints. Translate the red crosshairs to the proper position, if desired, to orient the pecs and lats on your character.

04 Delete unwanted joints or simplify for mobile gaming

Use the pink buttons to delete unwanted joints. It might be possible that you do not require pecs, lats, hamstrings, or biceps – use these buttons only to delete the joints and simplify down to 'mobile' if necessary.



01 Execute Scale Node and sketch skeleton

Push the button to activate the Scale Node. This will set the overall scale of the rig. Then hit button 2 to generate the sketch skeleton that is already in a base proportion. The animator needs to translate the root of their mesh to the 0 0 0 world space coordinate. The root of the sketch skeleton is locked.

02 Block out proportions of the skeleton

By using the open channels, and open channels only, begin to sketch out the proper proportion of the skeleton to the character. Locked are not to be unlocked, this will maintain the proper joint orientation and guarantee that your IK will be set up properly in Step 6. You can also mirror your skeleton for symmetry. Once you have the proportion you want, hit button 4 to lock the sketch skeleton into place. That will zero out your joints in your sketch skeleton.

03 Create leaf joints for deformation and counter rotation

Hit button 5 to execute the 'leaf helper' joints. These joints will assist in the counter

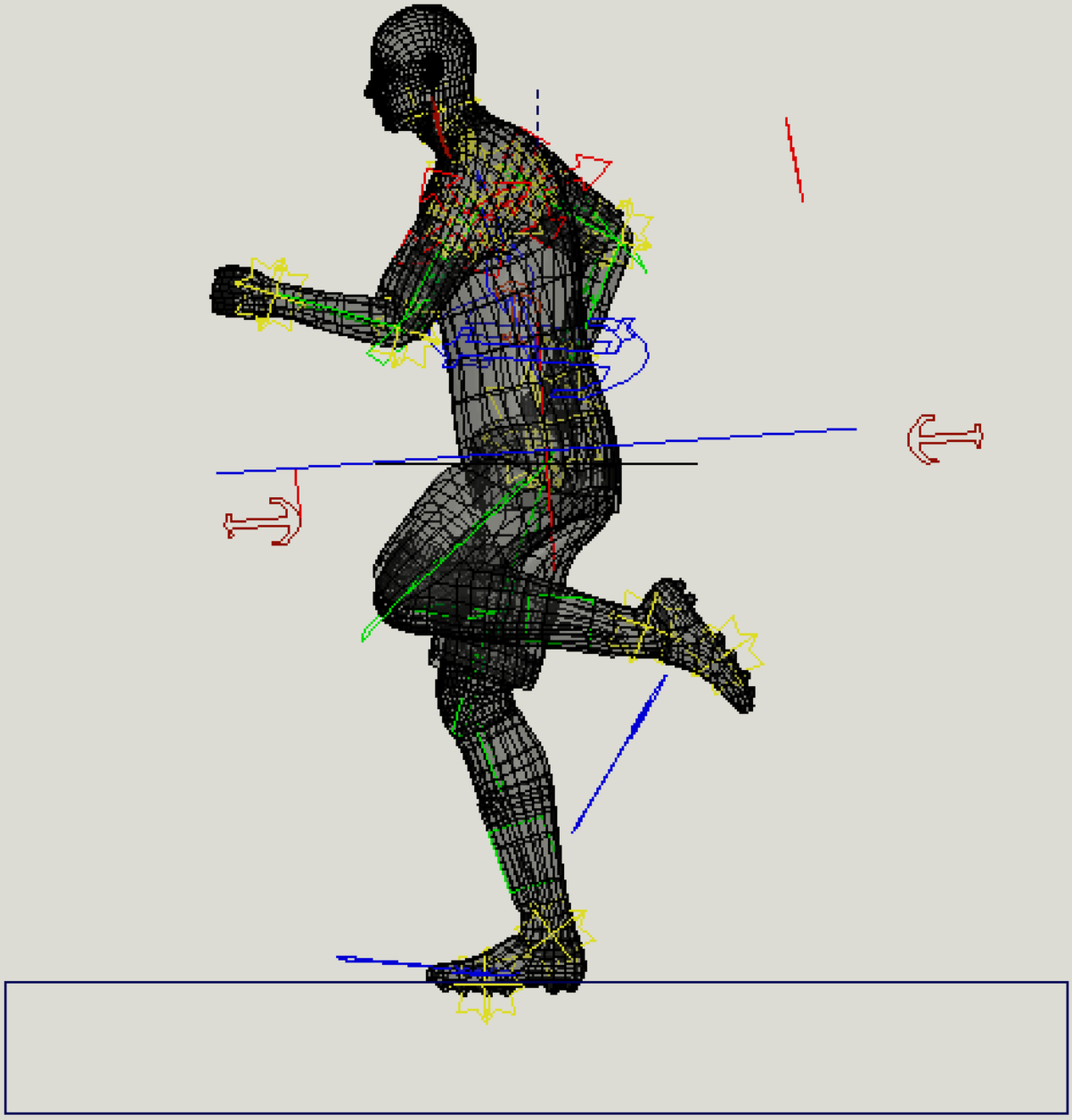
05 Reference in skinning pipeline and transfer weights

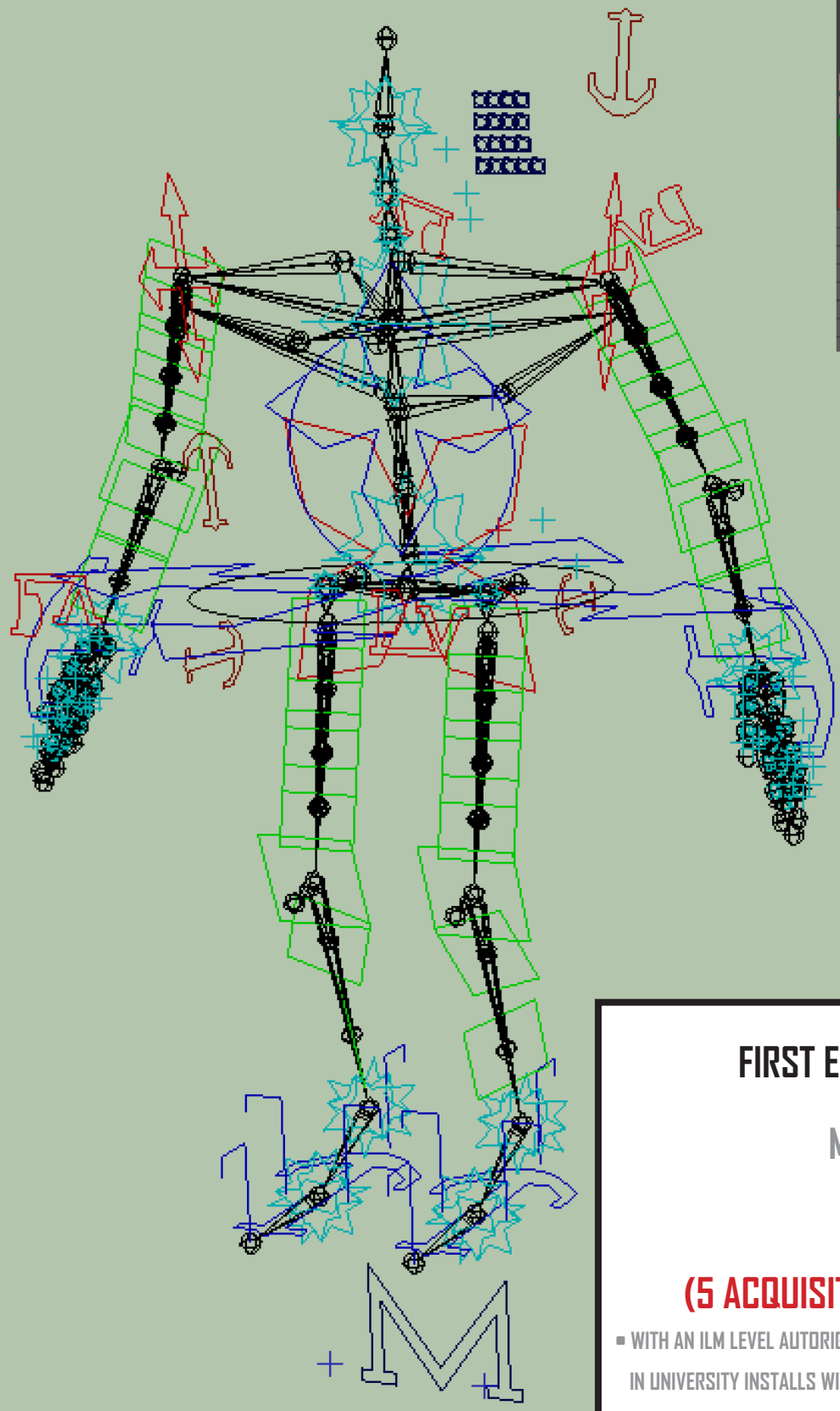
Select whether or not you have a 'mobile character' or a 'film next-gen character' (note for the quad you will pick whether your character is built like a cat or a horse) and hit button 8A to reference in the pipeline file. Scale the yellow controls so the reference mesh encompasses the character mesh. Hit 8B to transfer the skin weights. Your skinning should be near completed. Hit 8C to unreference the reference file. You now have a clean scene with weighting that is 90 to 95 per cent complete. Do any cleanup skinning at this point.

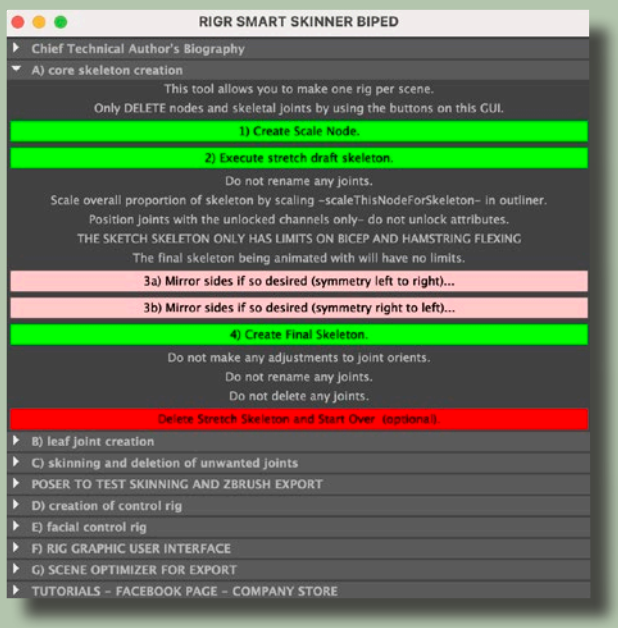
06 Create control rig and facial GUI

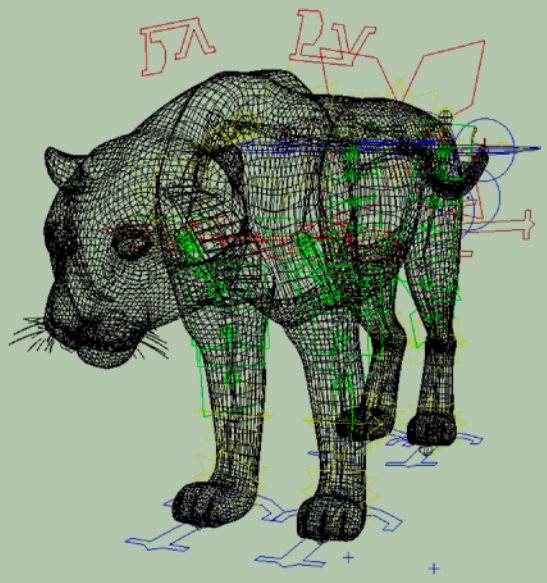
Now that you have a skinned file, hit button 9 to generate the entire control rig. Your rig is complete. The rigging process is a three-joint chain rig: a control rig driving an animation skeleton that drives a deformation skeleton. In regards to complexity, the control rig is at the level of a major motion picture studio. Hit button 10 to generate your facial GUI that can be used with blendShapes in Maya. Once you've done this, you're ready to animate!

• **DID YOU KNOW?** • All tutorial files can be downloaded from: filesilo.co.uk/3dartist-76









FIRST ENTREPRENEURIAL VENTURE

MY PLUGIN COMPANY

"BZP PRO"

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- 250 SCHOOLS RECEIVED PRODUCT AS OPPOSED TO FACEBOOK'S 170 SCHOOLS
- 80 HOURS OF ILM LEVEL RIGGING COMPLETED IN 15 MINUTES
- COVER OF WORLDWIDE MAGAZINE "3D ARTIST": ISSUE 76

ABOUT THIS VENTURE

VENTURE INCEPTION: Based on previous work experiences of how difficult and tedious skinning is, a technology was made that automated the process.

MANUFACTURER: Internal.

MANUFACTURER INVENTORY COST: No inventory, handled all on the cloud.

PROFIT MARGIN: Everything sold is profit.

POINT OF PURCHASE: Online website not currently up as well as vendors.

SHIPPING: Direct digital download- no cost in shipping.

VENTURE BURN: Approximately $1500.00 to write a compiler plugin that scrambles the MEL script, unannounced amount for the webserver.

VENTURE 'LUST' FACTOR: Three worldwide magazines have published giving great reviews, cover of worldwide magazine included, 5 acquisition reviews with source code valued at 20 million by the business partner of the supervisor on Hoth in The Empire Strikes Back.

EXIT STRATEGY: Any major film or game studio could buy this source code and incorporate it into their pipeline.

ADDRESSABLE MARKET: As a plug-in for Autodesk Maya, there are approximately 100,000 Maya user licenses that could use this. We initially wanted to make this standalone, now we just want to sell the source code.

MARKET NICHE: There are other auto riggers on the market, but ours completes 90 percent of the skinning as well as makes a user friendly process that can get the asset from model, to rig, to in game ready in a matter of minutes.

PURCHASE PROCESS: User will go online to a webpage or online vendor, give their credit card, it will automatically download to their machine, no effort on our part. This process is similar to how you would purchase a perpetual license at Microsoft, Adobe, or Autodesk; or how you would purchase a video game on XBOX Live or The PlayStation Network.

VENTURE VALUATION: Based on the review of the business partner of the Hoth Supervisor on "The Empire Strikes Back," the value of this cash cow that he set for acquisition is 20 million dollars. Even though this was set a few years back, more features have been added to this technology since then. I am still setting the acquisition price to 20 million in 2023.

ABOUT BZP PRO WITH THE SMART SKINNER PLUGIN

ENTREPRENEURIAL ACCOMPLISHMENTS TO PRESENT FOR HIRE TO A MAJOR GAME STUDIO AS A CHIEF VISUAL OFFICER

(MASTERING THE BUSINESS MODEL OF BILL GATES, STEVE BALLMER, PAUL ALLEN, AND MARK ZUCKERBERG)

1. FORMATION
IDENTIFY THE PROBLEM AND CONCEPTUALIZE THE LLC

CAN IDENTIFY A WORK PROCESS THAT IS IN NEED OF AUTOMATION IN THE INDUSTRY AND FORM A LLC THAT BRINGS ON PARTNERS FOR EQUITY TO ADDRESS THAT PROCESS ==> CAN RAISE MONEY FROM BANKING ALUM OF HARVARD AND YALE ==> CAN ASSIST IN THE WRITING OF PITCH DECKS PRESENTED TO VCS ==>

2. INNOVATION
DESIGN ENGINEER/ INVENT THE TECHNOLOGY

CAN INVENT A NEW TECHNOLOGY FROM SCRATCH THAT HAS A NEW TECHNICAL PROCEDURE THAT PRODUCES RESULTS AT THE LEVEL OF ILM AND IS VALUED AT 20 MILLION WITH OVER 15K LINES OF CODE ==> CAN CO-CREATE A FREEMIUM BUSINESS MODEL THAT OUT-PENETRATES FACEBOOK LLC IN UNIVERSITY PENETRATION PRE ANGEL INVESTMENT WITH OVER 250 SCHOOLS LICENSED WORLDWIDE ==>

3. INTEGRATION
MARKET THE LLC WORLDWIDE

CAN DEVELOP UNIVERSITY RELATIONS SETUPS LECTURING AND SHOWCASING THE TECHNOLOGY TO OVER 40 SCHOOLS WORLDWIDE ==> CAN ACQUIRE INTERNATIONAL ADVERTISEMENTS FOR THE LLC ==> CAN GET GLOWING REVIEWS FROM THE USER BASE, INCLUDING BEING CALLED "MIND BLOWING" FROM THE TOP PERSON IN THE INDUSTRY, IN THIS CASE THE SIGGRAPH CHAIR ==> CAN MAKE SUCH AN IMPRESSION IN THE INDUSTRY THAT WE ARE FEATURED ON BOTH THE COVER OF A WORLDWIDE MAGAZINE, THE WALL STREET JOURNAL MARKET WATCH, AND TRIAL TECH INCLUDED IN MAGAZINE ACCOMPANYING DVD ==>

4. CLOSURE
SELL OFF THE LLC

CAN GET MULTIPLE NDAS AND IMPRESS OVER THREE FORTUNE 500S FOR ACQUISITION REVIEW

EVERYTHING HAS BEEN ACCOMPLISHED EXCEPT FINALIZING AN ACQUISITION DEAL: NEGOTIATIONS WERE AROUND THE 20 MILLION DOLLAR RANGE

SMART SKINNER RIGGING PIPELINE SOFTWARE:

- WROTE ENTIRE TECHNOLOGY BY MYSELF IN MEL AND PYTHON
- CUSTOMIZABLE UPON REQUEST: FEATURED AT SIGGRAPH AND GDC
- ADVISED BY ILM COFOUNDER AFFILIATE TO NOT SELL BELOW $20 MILLION
- 3 ACQUISITION REVIEWS WITH 3 SEPARATE FORTUNE 100 COMPANIES
- RAISED INVESTMENT MONEY FROM BANKING ALUM OF HARVARD AND YALE
- FEATURED ON THE COVER OF A WORLDWIDE MAGAZINE
- TECH BURNED TO WORLDWIDE MAGAZINE'S INCLUDED ACCOMPANYING DVD
- 250 UNIVERSITIES ON 6 CONTINENTS RECEIVED PRODUCT

1. START WITH YOUR MODEL

2. GENERATE AND ALIGN SKELETON WITH GUI

3. ATTACH MODEL TO SKELETON AND PICK THE NUMBER OF SKIN INFLUENCES WITH GUI

4. REFERENCE IN ZBRUSH, NEXT - GEN, OR MOBILE PROXY WITH CORRECT SKIN WEIGHTS THAT ALIGNS WITH MODEL. TRANSFER WEIGHTS THEN UNREFERENCE. THIS HAPPENS ALL WITHIN GUI.

5. TEST SKIN WEIGHTING WITH GUI POSER LIBRARY

6. GENERATE ILM LEVEL CONTROL RIG INSTANTLY

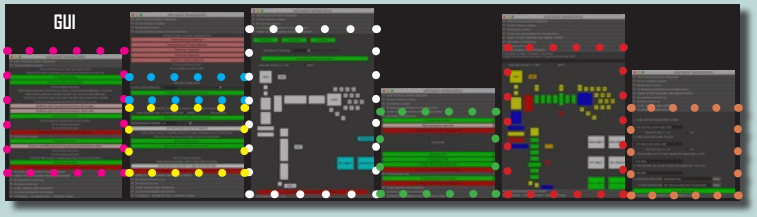
7. KEYFRAME CONTROL RIG WITH GUI BUTTONS

8. OPTIMIZE CHARACTER FOR IN GAME USE WITH GUI

EITHER 6.

9. OVER 80 HOURS SAVED IN 15 MINUTES

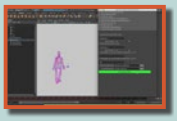
GUI



6. GENERATE MOCAP HIK RIG WITH GUI

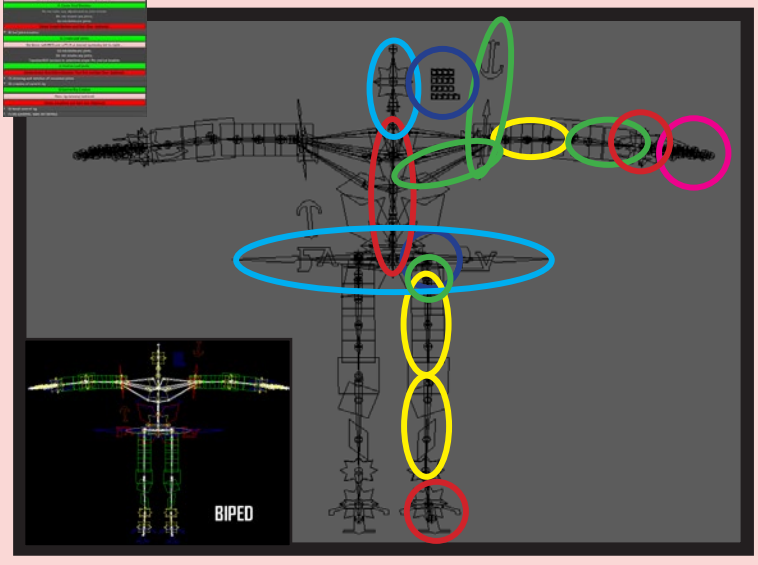
7. APPLY MOCAP DATA TO HIK RIG IN MAYA

8. OPTIMIZE CHARACTER FOR IN GAME USE WITH GUI



PRINCIPAL TECHNICAL ART FILM GAME CONVERGENCE

- SMART SKINNER SOFTWARE CONTROL RIG TECHNICAL INFLUENCES
- 80 HOURS OF LABOR COMPLETED IN 20 SECONDS (14K LINES OF CODE)
- MATCH HIGHLIGHTED COMPANY TO CIRCLED BODY PART



LUCASFILM Ltd

BI-MONTHLY BEST PRACTICES REVIEW COMMITTEE

SELECTED BY FORMER CTO OF PETER JACKSON'S WETA DIGITAL

ILM BLOCK PARTY

JANGO FETT

2K SPORTS

LUCASFILM

ANIMATION

LUCASARTS

EA GAMES

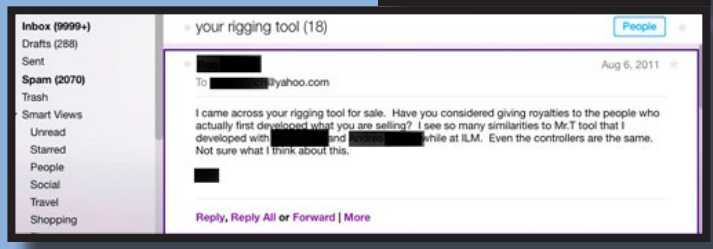
EA SPORTS

CHARACTERS EXPLORED AT LUCAS ANIMATION

TITLES EXPLORED AS EA GLOBAL RIGGING ATTENDEE

AS A CREDIT TO BRENT'S TECHNICAL ABILITY, IN A MATTER THAT WAS RESOLVED BECAUSE HE NEVER USED THE TECHNOLOGY FIRST HAND, NOR DID HE EVER SEE ANY OF THEIR CODE, THE SUPERVISING TECHNICAL DIRECTORS OF THE STAR WARS PREQUEL TRILOGY THOUGHT THAT BRENT'S AUTORIGGER TECHNOLOGY SO CLOSELY RESEMBELED THE OSCAR NOMINATED TECHNOLOGY ON "STAR WARS EPISODE I: THE PHANTOM MENACE," "STAR WARS EPISODE II: ATTACK OF THE CLONES," AND "STAR WARS EPISODE III: REVENGE OF THE SITH," THEY INITIALLY INQUIRED ABOUT REQUESTING ROYALTIES, WHICH OF COURSE WOULD BE ILLEGAL BECAUSE THEY DEVELOPED THE I. PROPERTY AT LUCASFILM, OWNED BY MR. LUCAS, AND THERE WAS NO PLAGERISM IN THE CODE WRITING, NOR DID THEY HAVE SKINNING TECH.

I CAN INVENT RIGGING TECH, PENETRATE GLOBALLY, AND RECEIVE INTERNATIONAL ADVERTISEMENTS



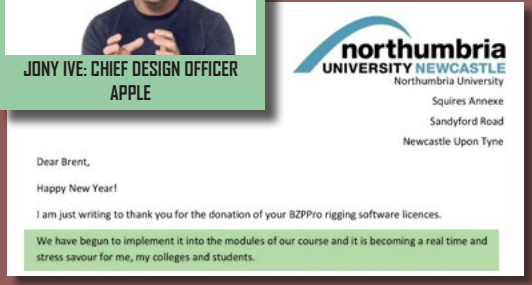
UNIVERSITIES LECTURED

NAMED "1 OF THE TOP 100 PEOPLE IN TECHNOLOGY" BY THE INTERCON CONFERENCE SPONSORED BY FACEBOOK AND AMAZON

UNIVERSITY REC FOR MY TECHNOLOGY

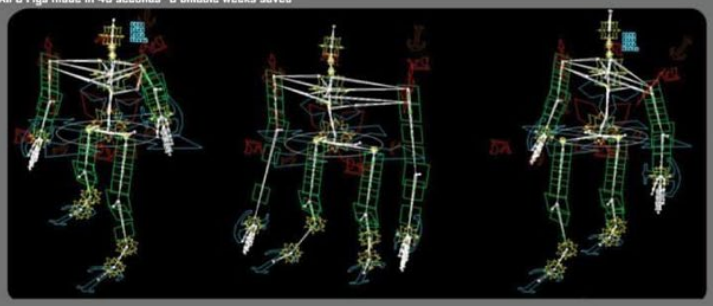
DEPARTMENT NOTABLE ALUM

JONY IVE: CHIEF DESIGN OFFICER APPLE

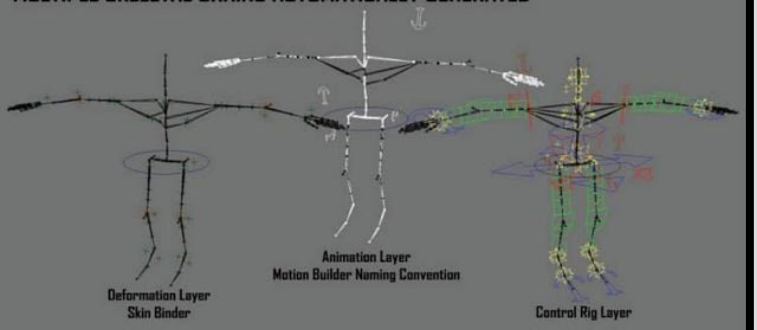


MAKE ANY PROPORTIONED RIG IN SECONDS

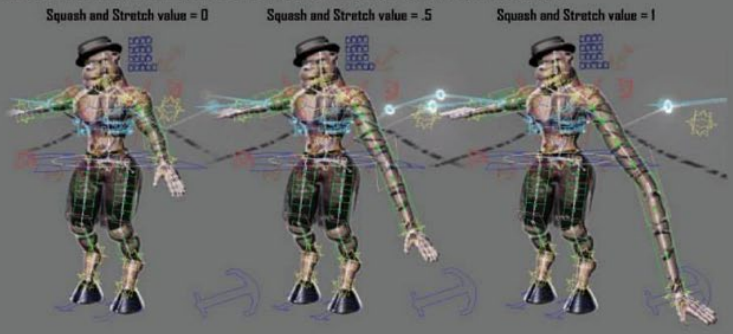
All 3 rigs made in 45 seconds- 6 billable weeks saved



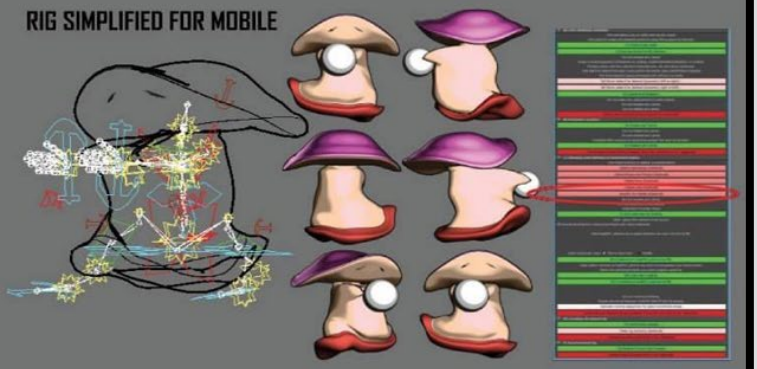
MULTIPLE SKELETAL CHAINS AUTOMATICALLY GENERATED



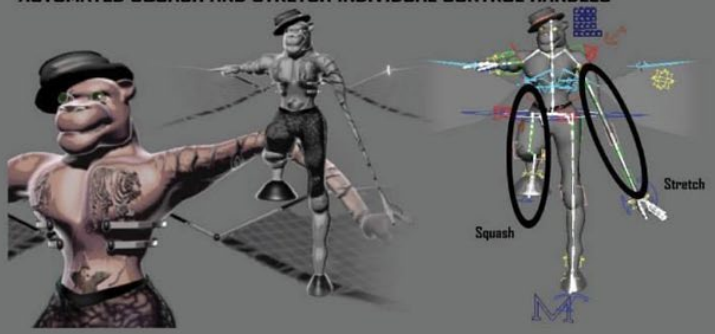
AUTOMATED SQUASH AND STRETCH LINEAR BLEND ATTRIBUTE



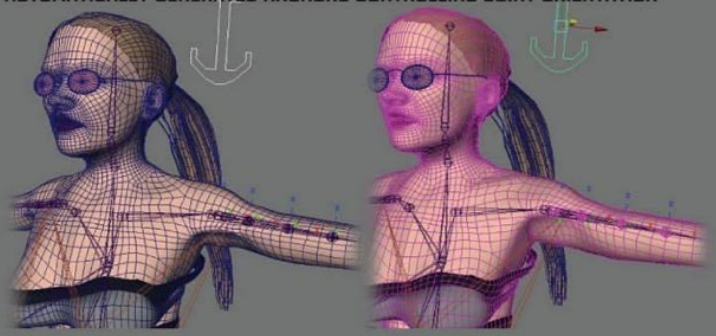
RIG SIMPLIFIED FOR MOBILE



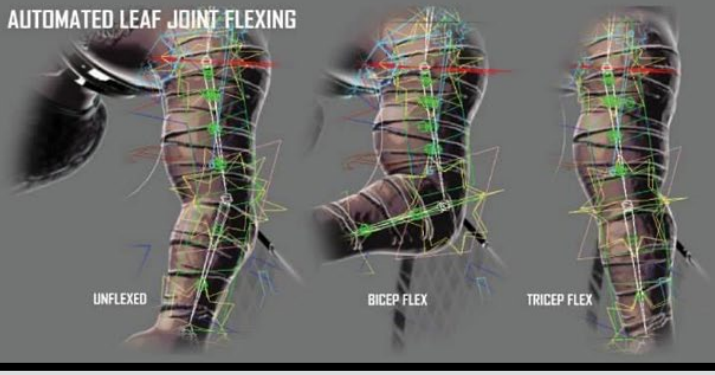
AUTOMATED SQUASH AND STRETCH INDIVIDUAL CONTROL HANDLES



AUTOMATICALLY GENERATED ANCHORS CONTROLLING JOINT ORIENTATION

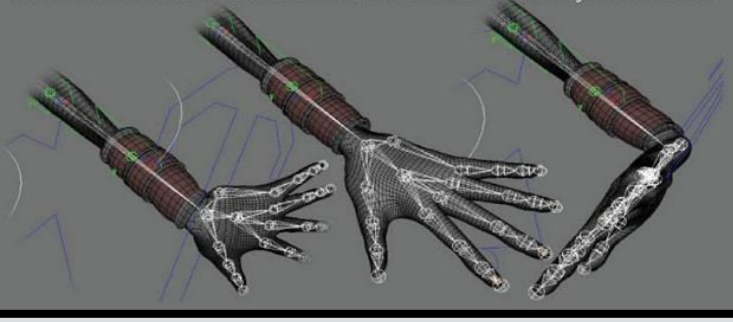


AUTOMATED LEAF JOINT FLEXING



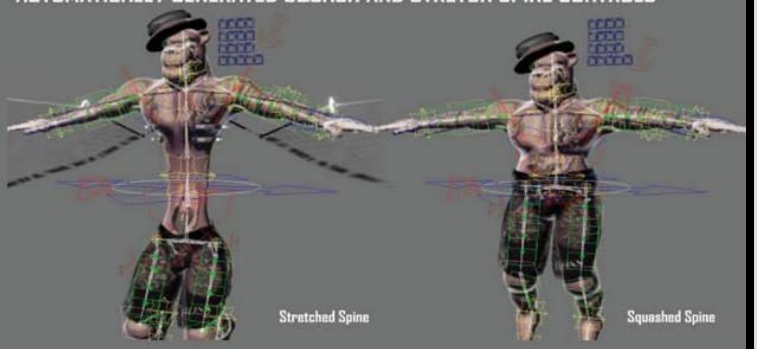
AUTOMATED GRADUAL FOREARM TWIST DEFORMATION

TWIST JOINTS ROTATE ON AUTOMATICALLY GENERATED AIM NODE BASED ON GLOBAL WRIST ORIENTATION- *forearm unbreakable*

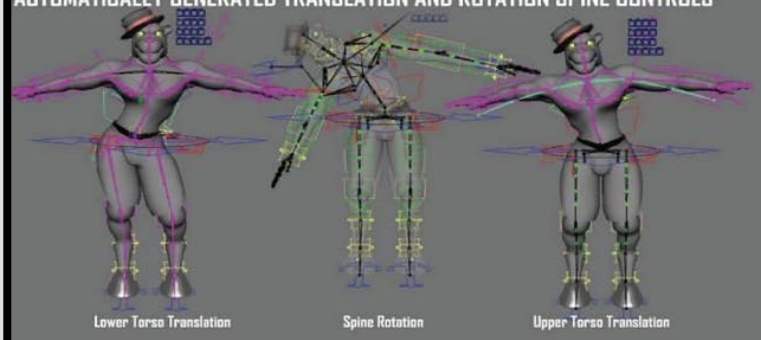


AUTOMATICALLY GENERATED DISTANCE NODE BASED CALF FLEXING

AUTOMATICALLY GENERATED SQUASH AND STRETCH SPINE CONTROLS



AUTOMATICALLY GENERATED TRANSLATION AND ROTATION SPINE CONTROLS

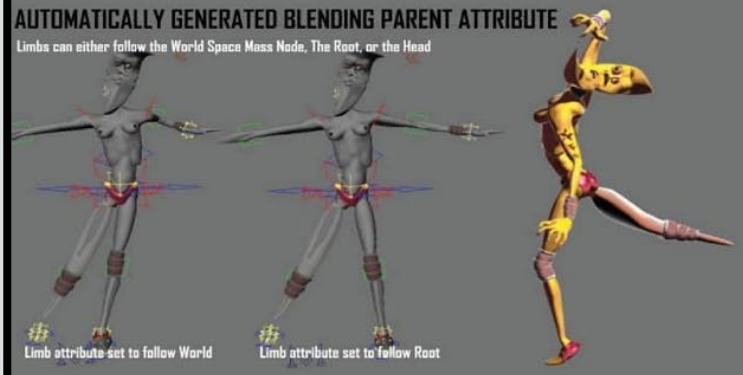


AUTOMATICALLY GENERATED BLENDSHAPE DRIVEN FACIAL GUI

IDEAL FOR PRE VIZ, TELEVISION FEATURE ANIMATION, OR VIDEO GAME DEVELOPMENT

AUTOMATICALLY GENERATED BLENDING PARENT ATTRIBUTE

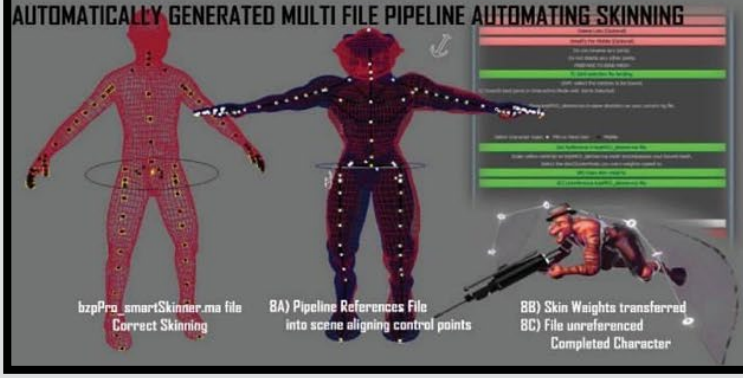
Limbs can either follow the World Space Mass Node, The Root, or the Head



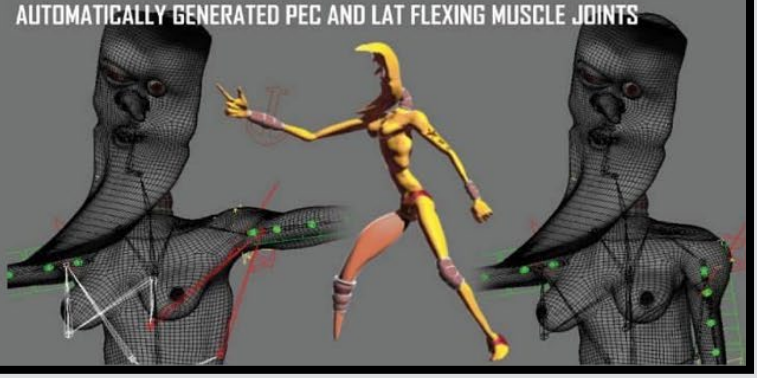
AUTOMATICALLY GENERATED AUTO CLAVICLE BLEND ATTRIBUTE

Clavicle can either follow hand anchor or move independently

AUTOMATICALLY GENERATED MULTI FILE PIPELINE AUTOMATING SKINNING



AUTOMATICALLY GENERATED PEC AND LAT FLEXING MUSCLE JOINTS

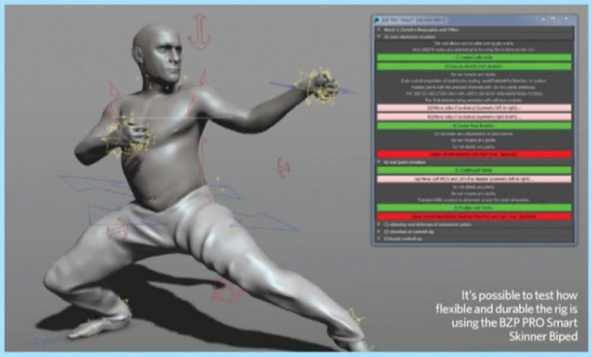


GREAT AUTORIGGER WORLDWIDE REVIEW FEATURED IN A WORLDWIDE MAGAZINE ('3D ARTIST MAGAZINE': ISSUE 68)

NOTE: VIA THEIR RECOMMENDATIONS, PRICE ADJUSTED AND GUI ADDED TO ADDRESS CONTROL RIG. AFTERWARDS, THE MAGAZINE FEATURED US ON THE COVER OF A FOLLOWING ISSUE.

NOTE: IN GREAT BRITAIN "PIECE OF KIT" IS SLANG FOR 'NEW PIECE OF SOFTWARE OR TECHNOLOGY". IT IS NOT DEROGATORY.

THE AUTHOR OF THIS REVIEW WAS THE HEAD GRAPHICS TRAINER AT OSCAR WINNING VFX STUDIO "DOUBLE NEGATIVE"



It's possible to test how flexible and durable the rig is using the BZP PRO Smart Skinner Biped

BZP PRO Smart Skinner

How much can you speed up your rigging process using the newly released Smart Skinner from BZP PRO?

REVIEW BY **Jahirul Amin,** director/producer and associate lecturer at NCCA, UK

I would like to compare skinning to the coffee creams that get left in a tin of Quality Street. For many people, it's the least enjoyable part of the CG pipeline. So when I was given the opportunity to review a piece of software that might make skinning a less time-consuming process, I was more than happy to try it.

The BZP PRO Smart Skinner Biped and Smart Skinner Quad for Maya are all-in-one rigging and skinning solutions. Smart Skinner is the brainchild of Brent Zorich, whose rigging credentials are solid, and this becomes apparent when you use this package.

As soon as it opens up, the Smart Skinner Biped feels immediately user-friendly. Tools are clearly labelled and organised, so you're up and running in no time. There are plenty of training videos on the website and Vimeo, so getting started is a simple affair. The logical, linear nature of the process makes Smart Skinner rather a blessing for those who struggle with technical skills.

The name of this package totally understates its capabilities. Yes, it skins, but you also get a fully-fledged rigging toolkit for your money. The impressive speed of this package became very apparent when I realised I'd forgotten to mirror some joints over, as I was back on track in a moment.

I'll talk you through the processes of this package, beginning with the skeleton. Once you've pressed the button to create the skeleton, it's easily fitted to the proportions of your model by rotating, scaling and translating the joints. Each of the joints will only allow you to manipulate them using a fixed set of attributes that have been locked down, so that the orientation of the joints doesn't lose its integrity. As a result, it does lack some flexibility, but what you lose in flexibility you gain in speed and ease. It is by no means inflexible in other areas, though. During the creation process of the skeleton, you can make it suitable for game, film or mobile. You can also add squash and stretch for cartoon-style setups, meaning a wide range of characters can be rigged.

The skinning functions work well. I tried it out on a mesh of around 60,000 faces, which presented no problem. Once you've done an initial bind, you reference in the BZP PRO skinned mesh and the weighting information is transferred from the file onto your mesh like a skinning transplant. Of course, you'll still have to go in and refine it, but the bulk of the work will have been done for you.

The control rig provides you with all you need to animate a realistic or cartoon-style biped. The twist controls enable you to put the rig into some extreme poses, while still having it deform well, even in tricky areas such as the shoulders and hips. What I will say, however, is that I found the control rig to be visually intense and off-putting due to the busy shapes that were chosen.

All things considered, I am a big fan of the Smart Skinner. In a world where time is rarely on your side, if you can handle the price tag, this piece of kit will come in very handy.

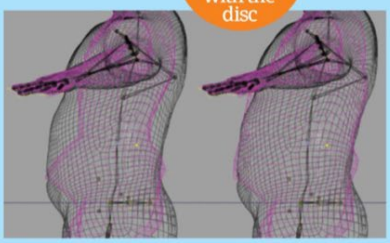
Essential info

Price: £1,487 / $2,500 US
www.bzppro.com

OPERATING SYSTEMS
- Windows
- Mac

TECHNICAL SPECIFICATIONS
- Maya 2012, 2013 and 2014

30 day trial with the disc



To transfer the weighting information, you must fit the reference model into the mesh

The good & the bad

- ✓ Speeds up the rigging process exponentially
- ✓ Creates a solid rig for animation
- ✓ Easy to set up
- ✓ Creates a great default bind with minimal tweaking needed to finish it off
- ✓ Ability to add squash and stretch controls
- ✗ Quite expensive
- ✗ Controls feel a little busy to begin with

Our verdict

Features	8/10
Ease of use	9/10
Quality of product	9/10
Value for money	7/10

"This is a solid solution, which does successfully speed up the character setup process"

Final Score 8/10

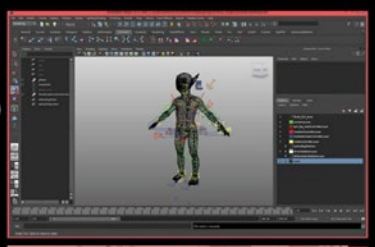
7 RIGS COMPLETED IN CASE STUDY

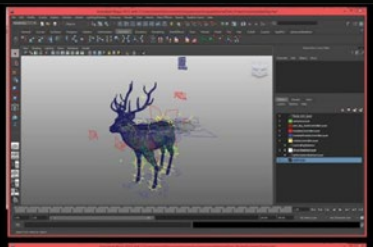
NOTE: Does NOT include facial sculpts, corrective sculpts, toes, tails, or rabbit ears.

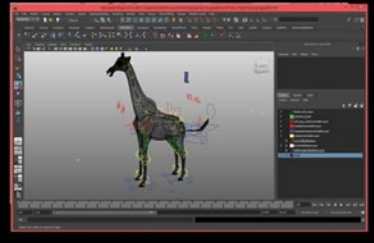
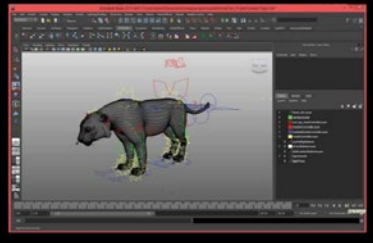
WITHOUT BZP PRO SOFTWARE :
560 HOURS TOTAL FOR ALL SEVEN (80 HOURS EACH)
$111,300 @ $200 per hour

WITH BZP PRO SOFTWARE :
3.5 HOURS TOTAL FOR ALL SEVEN
$700 @ $200 per hour

COMPANY SAVINGS WITH BZP PRO: 556.5 HOURS or $110,600.00

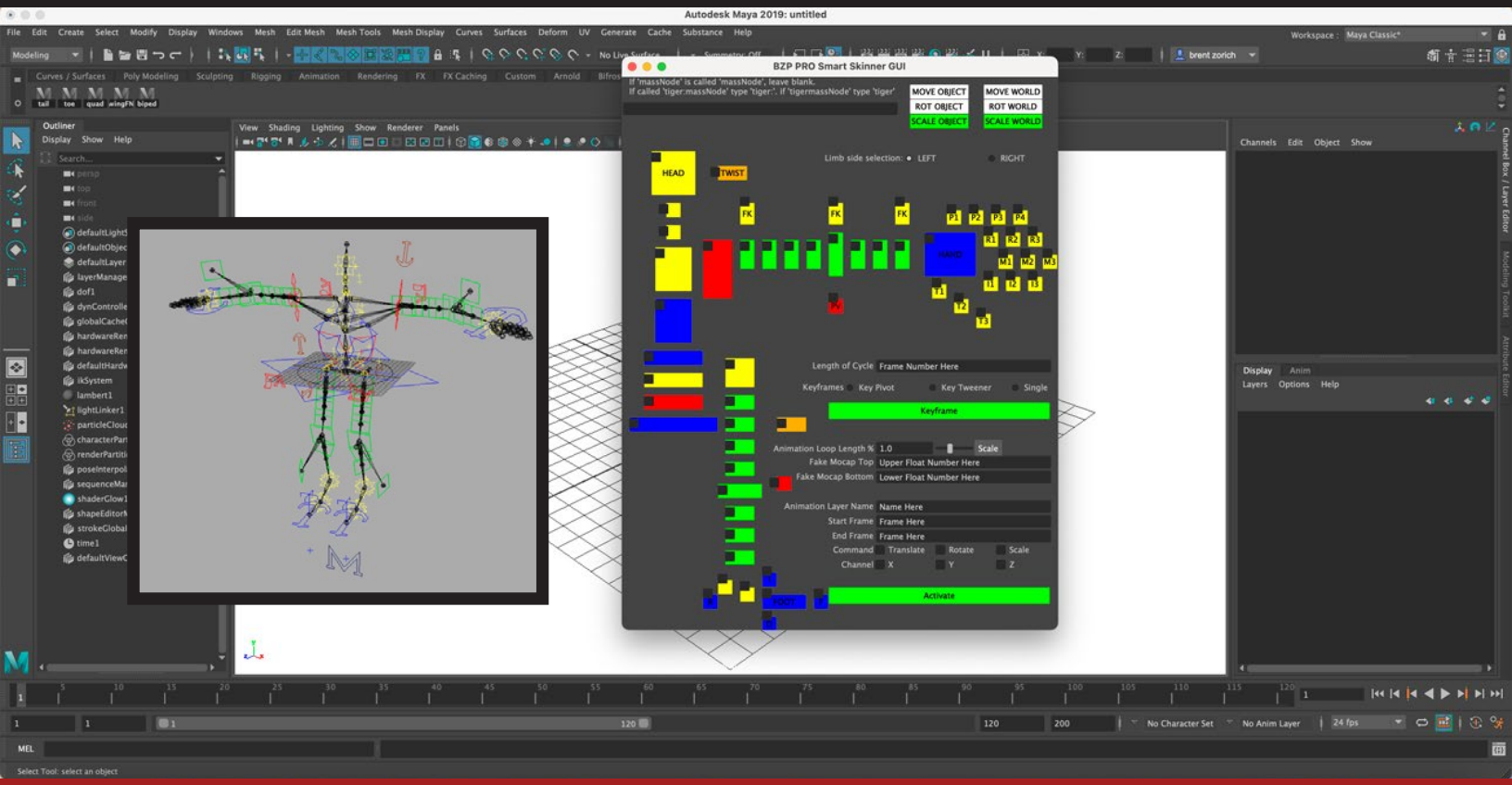




UPDATED TECHNOLOGY

ADDITIONAL SQUASH AND STRETCH JOINTS ARE ADDED TO THE FOREARMS AND SHINS THEREBY GIVING THE "CARTOONY SETUP" A BETTER DEFORMATION

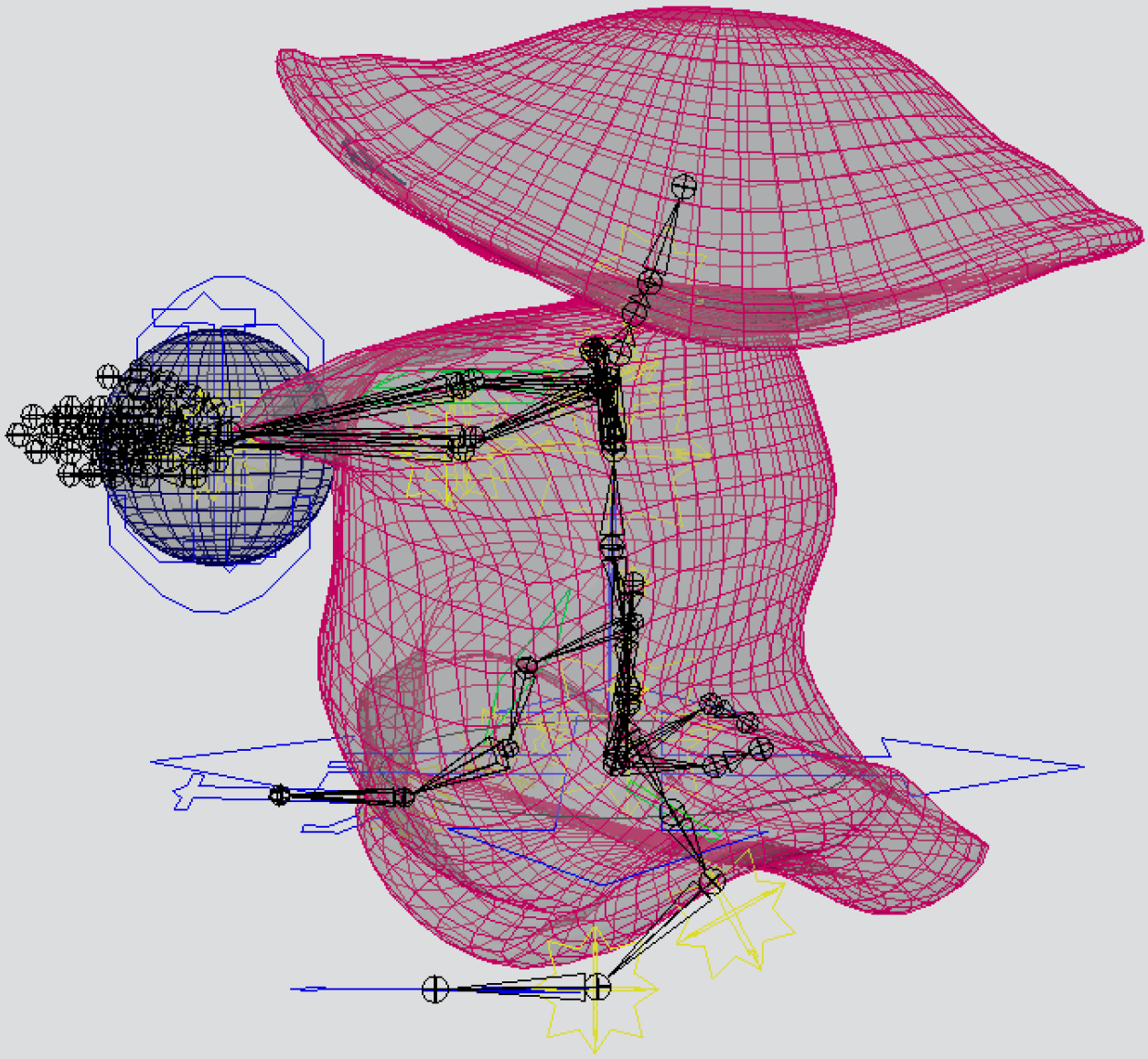


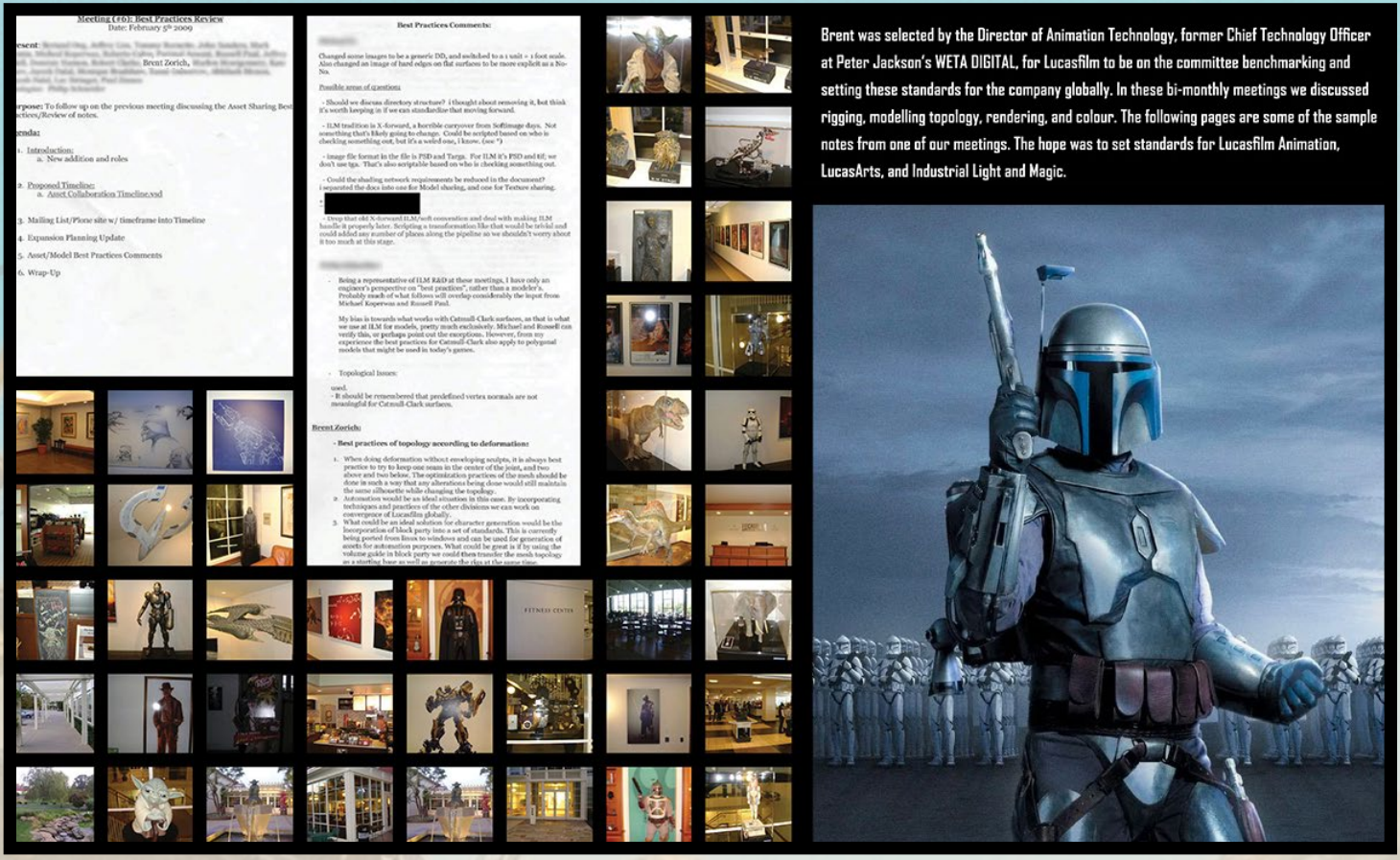
THE FIVE ACQUISITION REVIEWS

COMPANIES MUST BE DESCRIBED BRIEFLY DUE TO NEGOTIATIONS UNDER NDA

(FORMULA STILL ON THE MARKET)

- **(2014)** A FORTUNE 500 SOFTWARE COMPANY WORTH 10 BILLION: THEY DECIDED TO DEVELOP INTERNALLY
- **(2015-2017)** A FORTUNE 500 TECH FIRM WORTH 120 BILLION: AFTER THEIR VERBAL "YES", THE DEPARTMENT THAT ALMOST ACQUIRED BZP PRO GOT LAID OFF
- **(2013)** A FORTUNE 500 ANIMATION STUDIO: THE COMPANY DOWNSIZED AND CLOSED DOWN THE STUDIO THAT THE TEST INSTALL WAS LOCATED
- **(2016)** AN INDEPENDENT CHINESE COMPANY: LOST INTEREST IN BZP PRO
- **(2020-2021)** AN AUCTIONING BROKERAGE: COVID-19 DISRUPTED THE PROCESS, TALKS CEASED





Brent was selected by the Director of Animation Technology, former Chief Technology Officer at Peter Jackson's WETA DIGITAL, for Lucasfilm to be on the committee benchmarking and setting these standards for the company globally. In these bi-monthly meetings we discussed rigging, modelling topology, rendering, and colour. The following pages are some of the sample notes from one of our meetings. The hope was to set standards for Lucasfilm Animation, LucasArts, and Industrial Light and Magic.

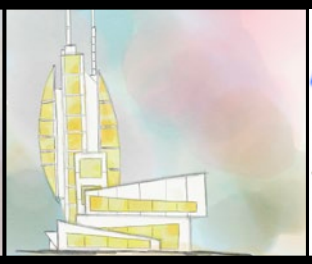
SIX PAGE PORTFOLIO

PROJECTS BRENT AFFECTED IN SOME WAY

EITHER THROUGH DIRECT WORK OR THROUGH GLOBAL CONFERENCE GUIDANCE

GAMMOREAN RIGGING

ADOBE PRE RELEASE TEAM



ADOBE PRE RELEASE TEAM

CLONE WARS RIGGING EXPLORATION

DURING THE FIRST THREE MONTHS OF THE SIX MONTH TENURE IN LUCASFILM ANIMATION SINGAPORE, BEFORE BEING PROMOTED AND RELOCATED TO SAN FRANCISCO, BRENT WAS NOT STAFFED ON A PROJECT. THIS GAVE HIM OPPORTUNITY TO DO R AND D EXPLORATION ON CLONE WARS AND ILM FILES SUCH AS GENERAL GRIEVOUS, ANAKIN SKYWALKER, PADME, KIT FISTO, AND SEVERAL OTHERS. BRENT WAS TEARING THEIR RIGS APART AND REBUILDING THEM MORE EFFICIENTLY WITH STANDARD KNOWLEDGE ON ALL OF LUCASFILM IP.

TRAINING FROM THESE SUPERVISORS

THE DISCOVERY CHANNEL MYSTERY DINOSAUR LEAD RIGGING - MODELING

FINE ART

RIGGING PROTOTYPING

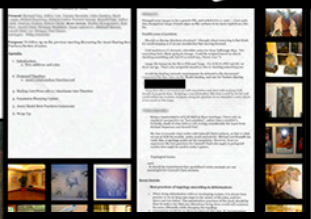
EA HARRY POTTER & THE ORDER OF THE PHOENIX GLOBAL RIGGING GUIDANCE

DISNEY RIGGING PROTOTYPING

EA SPORTS SUPERMAN RETURNS LEX LUTHOR WARDROBE MODELING

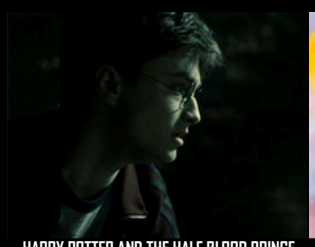
LUCASFILM EXEC TRAINING

SKYWALKER RANCH R AND D

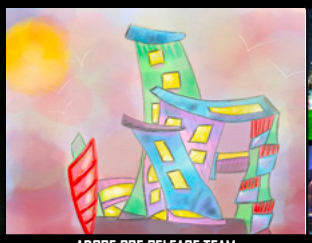


LUCASFILM BEST PRACTICES TEAM SELECTED BY FORMER CTO OF PETER JACKSON'S WETA DIGITAL (1 OF 10 MEMBERS)

WHAT IS FILM/ GAME CONVERGENCE? RESEARCH AND DEVELOPMENT INTO SEEING WHAT COMMON ENGINEERING TECHNICAL ASPECTS OF CHARACTERS FROM ALL THREE DIVISIONS CAN BE USED TO BUILD A SUPER ASSET WHICH WILL WORK IN FILM, GAME, OR TELEVISION SAVING MONEY. THE VERSION BRENT CREATED WAS AHSOKA TANO FOR THE XBOX 360. THE SIDE BY SIDE COMPARISON THAT INCORPORATED THE RIG OF JANGO FETT FROM ACADEMY AWARD NOMINATED "STAR WARS EPISODE II: ATTACK OF THE CLONES" WAS SHOWN TO GEORGE LUCAS IN SINGAPORE.



HARRY POTTER AND THE HALF BLOOD PRINCE HARRY POTTER MONTHLIES EDITING



ADOBE PRE RELEASE TEAM

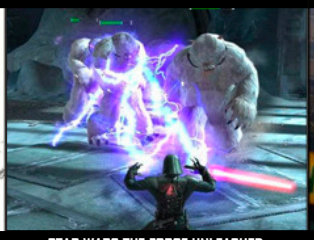
GLOBAL RIGGING ATTENDEE

FILM GAME CONVERGENCE WORK SHOWN TO GEORGE LUCAS

FILM GAME CONVERGENCE WORK SHOWN TO GEORGE LUCAS

LUCASFILM INDIANA JONES RIGGING (SPIELBERG)

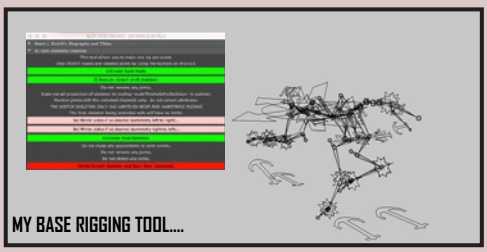
FINE ART



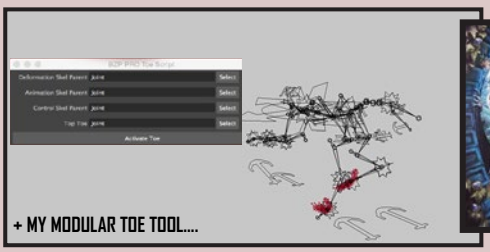
STAR WARS THE FORCE UNLEASHED WAMPA LEAD RIGGING

TAKE TWO INTERACTIVE NBA 2K RIGGING R AND D

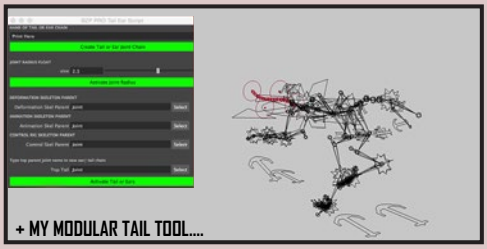
EA SPORTS NHL 09 GLOBAL RIGGING GUIDANCE



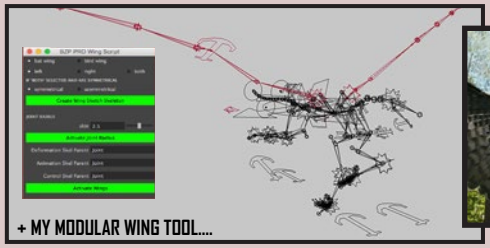
MY BASE RIGGING TOOL....



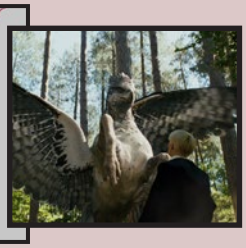
+ MY MODULAR TOE TOOL....



+ MY MODULAR TAIL TOOL....



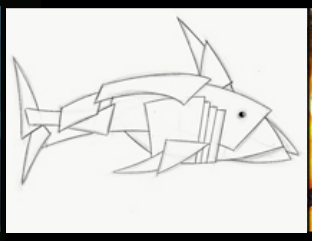
+ MY MODULAR WING TOOL....



MODULAR ENGINEERING CASE STUDY ON BUCKBEAK FROM HARRY POTTER 3 WITH MY SOFTWARE I AUTHORED: 90 HOURS OF WORK COMPLETED IN 5 MINUTES

NOTE: IN 2020, AFTER POSTING THE INITIAL BUCKBEAK MODULAR SHEET IN BRENT'S LINKEDIN FORUM, THE MAJOR VISUAL EFFECTS HOUSE, "THE FRAMESTORE-CFC", WHO WAS OSCAR NOMINATED FOR MAKING THE ACTUAL BUCKBEAK IN THE FILM "HARRY POTTER AND THE PRISONER OF AZKABAN" IN 2004 FOR ALFONSO CUARON AND JK ROWLING, REACHED OUT AND REQUESTED HIS WORK AS WELL AS REFERRALS. BRENT COULD NOT RECIPROCATE IN 2020 DUE TO BOTH TAKING CARE OF HIS DAD AT THE TIME WHO HAD ILL HEALTH DUE TO MULTIPLE SCLEROSIS AS WELL AS WHAT WAS GOING ON WORLDWIDE WITH COVID-19.

REBEL TROOPER RIGGING



ADOBE PRE RELEASE TEAM

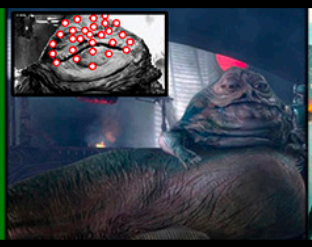
EA SPORTS NFL TOUR
LEAD RIGGING

LUCASFILM STAR WARS CLONE WARS
CAD BANE COLOR CORRECTION

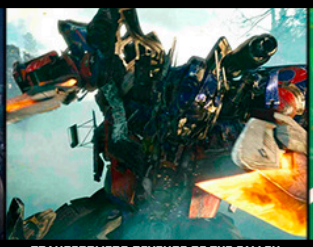
LUCASFILM STAR WARS THE FORCE UNLEASHED
BOBA FETT LEAD RIGGING

JABBA THE HUTT REQUIRED A JOINT BASED FACIAL DESIGN THAT WOULD MIMIC THE FACS SYSTEM POSES, OPTIMIZED, ON A CONSOLE. THE END RESULT THAT BRENT DESIGNED GAVE THE JABBA IN THE FORCE UNLEASHED THE MOST LIFELIKE AND FLUID PERFORMANCE OF THE CREATURE, FILM INCLUDED, TO THAT DATE.

EA SPORTS MADDEN NFL
LEAD RIGGING



LUCASFILM STAR WARS THE FORCE UNLEASHED
JABBA THE HUTT LEAD RIGGING



TRANSFORMERS REVENGE OF THE FALLEN
OPTIMUS PRIME DAILIES

TAKE TWO INTERACTIVE
NBA 2K RIGGING R AND D

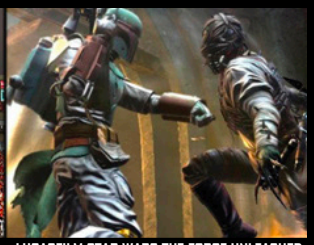
ONE OF THE TASKS THAT BRENT WAS DOING AT LUCASFILM WAS TESTING ILM'S BLOCK PARTY RIGGING SOFTWARE AT HIS DESK ON HIS LINUX MACHINE. BRENT WAS COMPARING THE FUNCTIONALITY, WITH WORKING KNOWLEDGE, OF THE ILM SOFTWARE TO THAT OF LUCASARTS' TOOL PARTY RIGGING SOFTWARE AND SEEING WHAT COULD BE PORTED INTO AUTODESK MAYA AS A DROP DOWN.

TIGER WOODS RIGGING R AND D

INDUSTRIAL LIGHT & MAGIC

- WEEKLY CREATURE R AND D
- QA ON OSCAR WINNING "BLOCK PARTY" RIGGING SOFTWARE
- EXECUTIVE PROPOSAL SUBMISSION: "OAS"

EA SPORTS NCAA FOOTBALL
LEAD RIGGING



LUCASFILM STAR WARS THE FORCE UNLEASHED
BOBA FETT LEAD RIGGING

WORKING KNOWLEDGE/ QA ON ILM
STANDARD BIPED, WING, QUAD SETUPS

EA SPORTS NCAA FOOTBALL
LEAD RIGGING

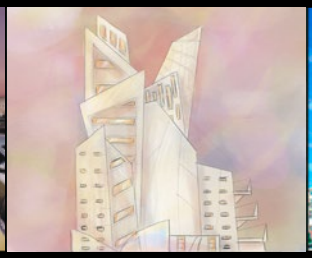
EA SPORTS NCAA FOOTBALL
LEAD RIGGING

ADOBE PRE RELEASE TEAM

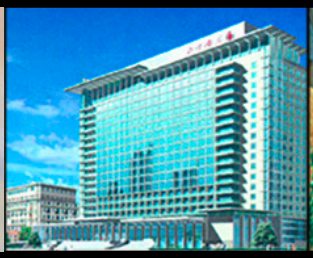
EA SPORTS NCAA FOOTBALL
LEAD RIGGING

WHILE AT GENSLER AND NBBJ, THE TWO LARGEST ARCHITECTURAL DESIGN FIRMS IN THE WORLD, BRENT LEARNED AND APPLIED ASPECTS OF SPATIAL ORIENTATION, WAYFINDING, AND DESIGN, THAT CAN BE ALTERED TO APPLY DIRECTLY TO VIDEO GAME ENVIRONMENT DESIGN.

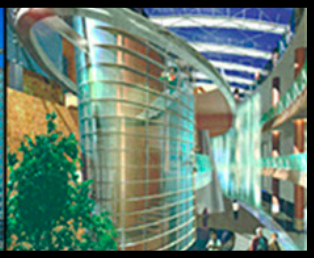
GENSLER ARCHITECTURE



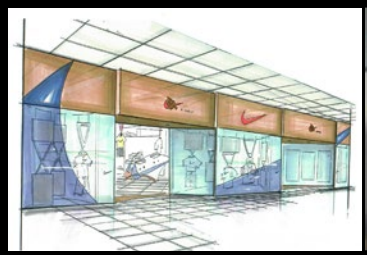
ADOBE PRE RELEASE TEAM



NBBJ ARCHITECTURE

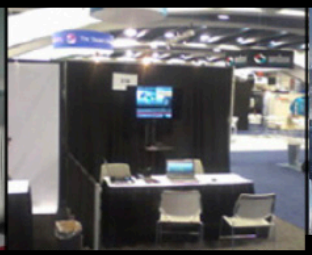


NBBJ ARCHITECTURE

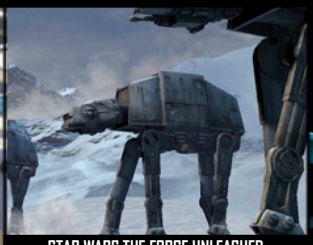


NIKE INDUSTRIAL DESIGN

MY PERSONAL BOOTH AT SIGGRAPH



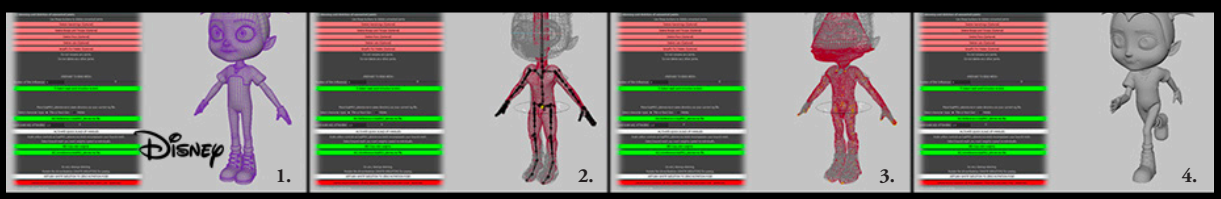
MY PERSONAL BOOTH AT GDC



STAR WARS THE FORCE UNLEASHED
AT-AT QUAD LEAD RIGGING

STAR WARS THE FORCE UNLEASHED
ULTIMATE EVIL LEAD RIGGING

CLONE WARS COLOR CORRECTION



AUTOSKINNING PIPELINE WITH PROXY TECHNOLOGY:

1. START WITH YOUR MESH
2. REFERENCE IN PROXY WITH CORRECT SKINNING VIA GUI (AUTOMATICALLY ALIGNS TO JOINTS)
3. SCALE UP PROXY TO ENCOMPASS MESH
4. TRANSFER SKIN WEIGHTS AND UNREFERENCE VIA GUI... COMPLETED MESH

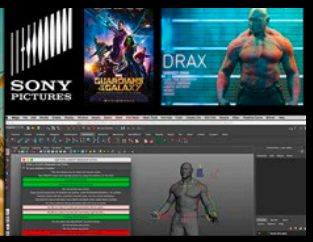
Disney

HAVING TAKEN PRIVATE ART LESSONS SINCE CHILDHOOD, BRENT WAS CONTACTED BY ADOBE TO BE A TEST ILLUSTRATOR (QA) ON THEIR PRIMARY SOFTWARE, ADOBE PHOTOSHOP. IN COLUMBUS ON HIS IPAD, HE TESTED THE LATEST PLUGINS, TOOLS, AND BRUSHES FOR THE APPLE DIVISION OF ADOBE, GIVING THE TEAM FEEDBACK IN THE TEST FORUM.

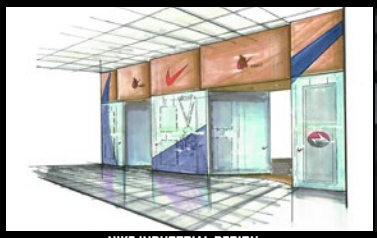
ADOBE PRE RELEASE TEAM

HARRY POTTER AND THE HALF BLOOD PRINCE
DUMBLEDORE MONTHLIES EDITING

TRANSFORMERS REVENGE OF THE FALLEN
DEVASTATOR DAILIES



SONY DRAX RIGGING PROTOTYPING



NIKE INDUSTRIAL DESIGN

STAR WARS THE FORCE UNLEASHED
BOBA FETT LEAD RIGGING

DRAX THE DESTROYER
RIGGING PROTOTYPING

MICHAEL JACKSON'S PR CONTACTING
ABOUT REPRESENTING ME

EA SPORTS MADDEN NFL
LEAD RIGGING

FINE ART

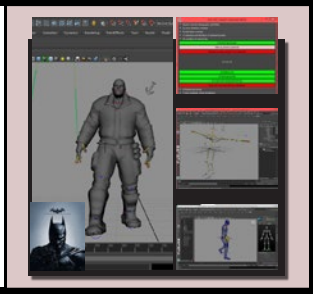
TAKE TWO INTERACTIVE
COLLEGE HOOPS 2K RIGGING

WINNER NAMED "ONE OF THE TOP 100 PEOPLE IN TECHNOLOGY AND INNOVATION" ACCORDING TO THE INTERCON CONFERENCE SPONSORED BY FACEBOOK AND AMAZON

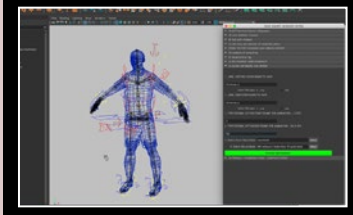
EA SPORTS NFL TOUR
LEAD RIGGING

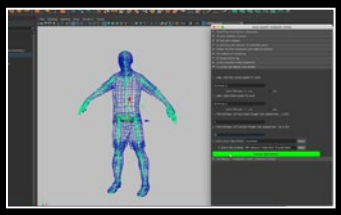
EA SPORTS NFL TOUR
LEAD RIGGING

LUXURY SUV DESIGN ILLUSTRATION
CLIENT: OWNER OF COLUMBUS BLUE JACKETS



AUTOMATED MOTION CAPTURE TECHNOLOGY

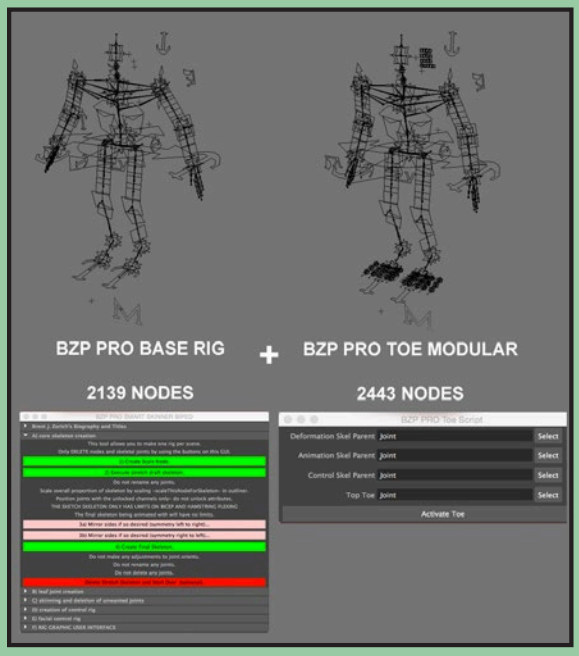


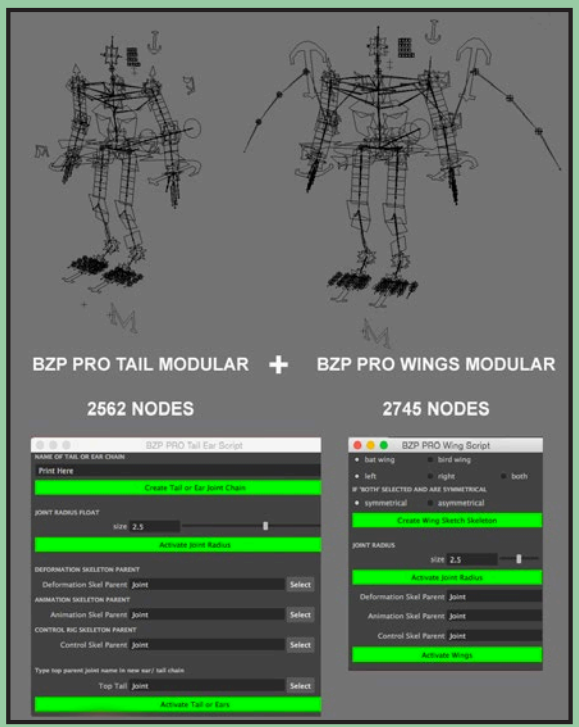


START SCENE IN MAYA = END SCENE IN MAYA = IN UNITY

MAYA SCENE OPTIMIZER FOR FBX FORMAT THAT WILL BRING AN OPTIMIZED PIPELINE INTO UNITY OR UNREAL WITH BAKED ANIMATION KEYS

DESIGNING MODULAR ENGINEERING SYSTEMS IS BRENT'S SPECIALTY. HE IS ABLE TO DESIGN TOOLS, PLUGINS, AND SCRIPTS, IN BOTH PYTHON AND MEL THAT AUTOMATE REPETITIVE WORK AT THE LEVEL OF INDUSTRIAL LIGHT & MAGIC IN A FRACTION OF THE TIME.





MODULAR ENGINEERING: 90 HOURS OF WORK COMPLETED IN 5 MINUTES

AFTER THE INITIAL LAUNCH, THE BZP PRO SMART SKINNER SOFTWARE WAS REDESIGNED BY BRENT TO INCLUDE AN EASY DRAG AND DROP SYSTEM THAT WOULD ENABLE MOTION CAPTURE IN AUTODESK MAYA. THIS SYSTEM WAS USED TO PROTOTYPE CHARACTERS WITH AUTODESK MOTION FOR BOTH SONY PICTURES AND WALT DISNEY FEATURE ANIMATION.

SONY RIGGING PROTOTYPING

SONY RIGGING PROTOTYPING

STAR WARS THE CLONE WARS
OBI WAN COLOR CORRECTION

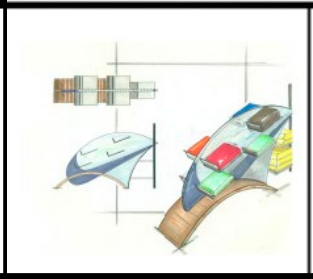
MY BLENDSHAPE MIRROR TOOL

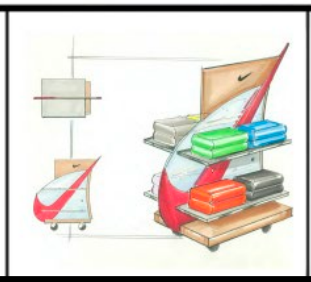
EA SPORTS FIFA 09
GLOBAL RIGGING GUIDANCE

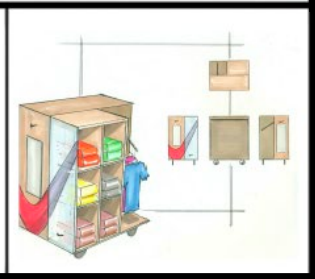
DUE TO SOFTWARE I DESIGNED "EASE OF USE", SOPHOMORES IN COLLEGE WITH LITTLE TRAINING ARE ABLE TO TECHNICALLY CONSTRUCT CHARACTERS AT THE LEVEL OF INDUSTRIAL LIGHT AND MAGIC AS SEEN IN THESE PHOTOS.

PUBLIC ENDORSEMENT FROM SIGGRAPH CHAIR:
"MINDBLOWING"

NIKE WAS APPROACHED BY BRENT ABOUT REBRANDING AND REDESIGN/ MARKET STRATEGY THROUGH RETAIL IN 1998 FOR AN UNDERGRADUATE THESIS PROJECT IN INDUSTRIAL DESIGN. THE PROJECT MADE SUCH HEADWAY, THAT IT SOLIDIFIED POSITIONS AFTER GRADUATION AT THE TWO LARGEST ARCHITECTURAL DESIGN FIRMS IN THE WORLD: NBBJ AND GENSLER.


NIKE INDUSTRIAL DESIGN


NIKE INDUSTRIAL DESIGN


NIKE INDUSTRIAL DESIGN

REEBOK INDUSTRIAL DESIGN

WHEN FIRST JOINING EA ORLANDO, THE DESIGN OF THE MADDEN NFL SYSTEM WAS VERY SIMPLISTIC. BRENT REDESIGNED THE SYSTEM TO MAKE THE ARMS ANATOMICALLY CORRECT, AS WELL AS ADDED TWENTY TO TWENTY FIVE ADDITIONAL LEAF JOINTS IN THE ARM AND LEGS TO MAKE SURE THAT THEY FLEXED PROPERLY. THIS ACCURATE AND NECESSARY CHANGE CAUSED THE ANIMATION TEAM TO RETARGET THE ENTIRE EA SPORTS ANIMATION FOOTBALL LIBRARY TO BRENT'S SETUP.

MADDEN NFL MILESTONE ACHIEVEMENT ON ELECTRONIC ARTS: TOP GROSSING MULTI BILLION DOLLAR ANNUAL TITLE

FIXED NON ACCURATE ARM PROPORTIONS:

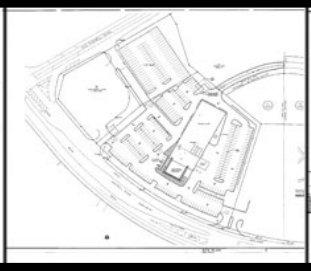
ENTIRE 10K ANIMATION LIBRARY RETARGETED TO MY RIG SETUP

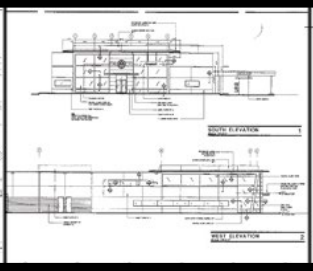
NON ACCURATE

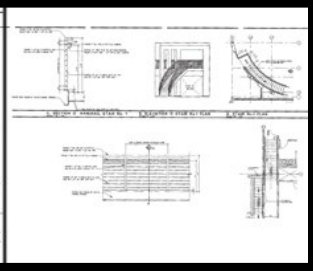
ACCURATE

EA SPORTS MADDEN NFL RIGGING SYSTEM DESIGN

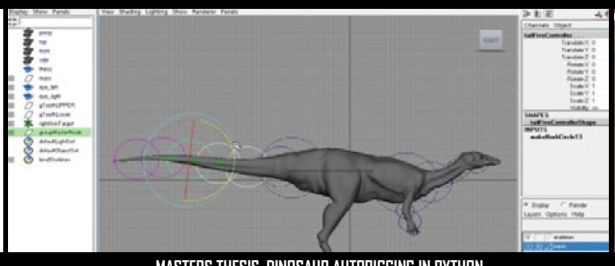
EA SPORTS NBA LIVE 09
GLOBAL RIGGING GUIDANCE

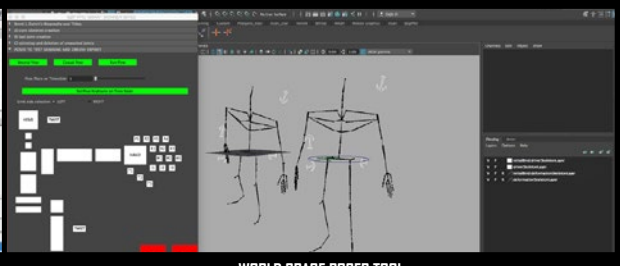





GENSLER ARCHITECTURAL CONSTRUCTION DOCUMENTS FROM THE ARCHITECTURE FIRM RANKED NUMBER 1 WORLDWIDE

THE MASTERS THESIS AT ACCAD WAS VERY JURASSIC PARK ORIENTED. THE GRADUATE RESEARCH TEAM, UNDER THE SUPERVISION OF THE ACCAD DIRECTOR WHO WAS THE FORMER HEAD OF THE RINGLING SCHOOL OF ART AND DESIGN MADE A 1 HOUR LONG DOCUMENTARY WITH THE BURPEE MUSEUM IN ROCKFORD, ILLINOIS, THAT WAS AIRED NATIONALLY. PART OF THIS PRODUCTION FOR BRENT'S THESIS WAS AUTOMATING THE SETUPS IN PYTHON.

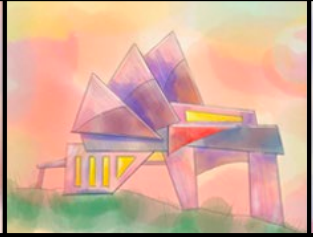

MASTERS THESIS: DINOSAUR AUTORIGGING IN PYTHON


WORLD SPACE POSER TOOL

DURING EMPLOYMENT AT EA SPORTS, BRENT WAS IN GLOBAL MEETINGS AND INVOLVED WITH "FILE SWAPPING" WITH OTHER ELECTRONIC ARTS EMPLOYEES IN BOTH EAC (VANCOUVER) AND EA LONDON. TECHNOLOGY WAS COMMONLY DISCUSSED AND CRITIQUED VIA VIDEO CONFERENCING WHERE BRENT HAD ACCESS TO THE MAJORITY OF EA RIGS ON HIS DESKTOP, CRITIQUING, DIRECTLY.

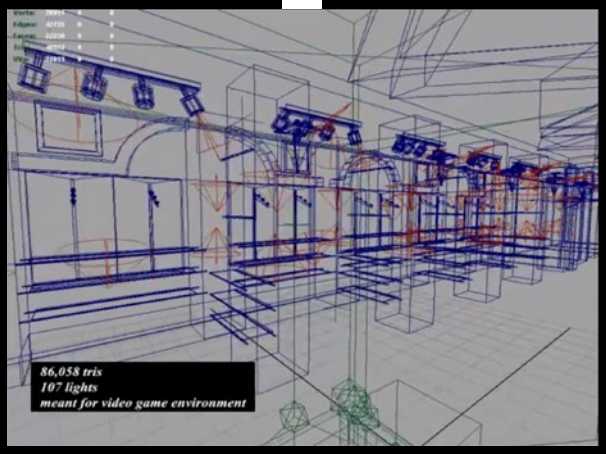
ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM


ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM

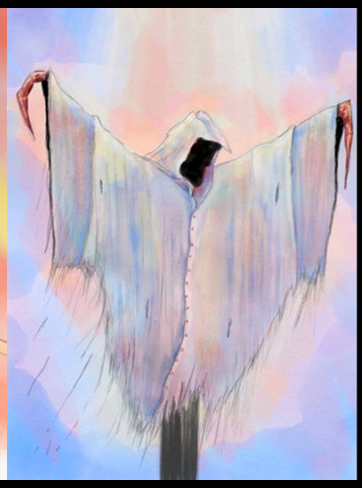
THIS WAS A TWENTY WEEK OUTREACH PROGRAM THROUGH DREAMWORKS SKG AND ACCAD AT THE OHIO STATE UNIVERSITY. IN THIS PHOTO HIGHLIGHTED IN COLOR ARE BRENT J. ZORICH AND JEFFREY KATZENBERG, WHO IS THE "K" IN DREAMWORKS "SKG."



VIDEO GAME LIGHTING AND ENVIRONMENT IN MAYA

ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM



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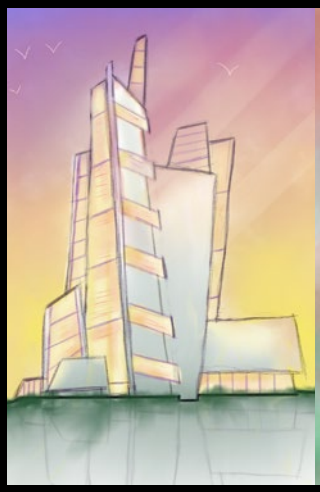

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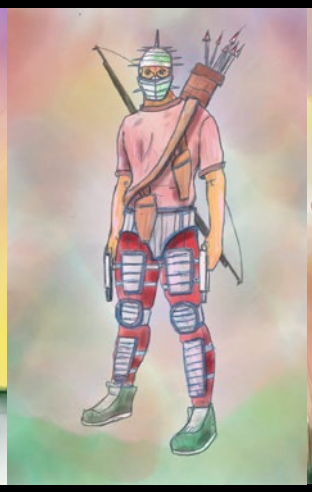

ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM

ADOBE PRE RELEASE TEAM

SKETCHES OF BRENT ZORICH CLOTHING LINE

SKETCHES OF BRENT ZORICH CLOTHING LINE

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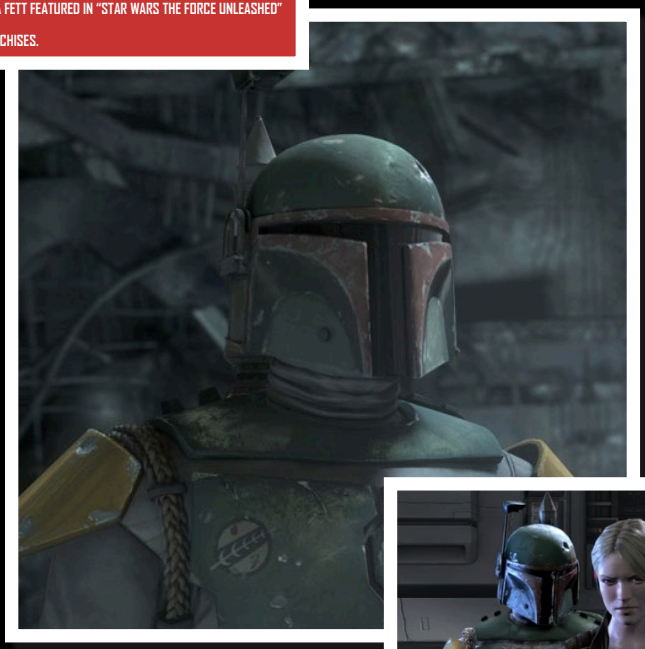
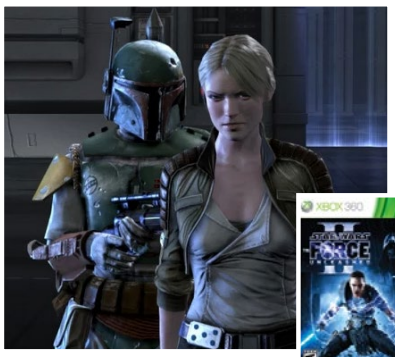
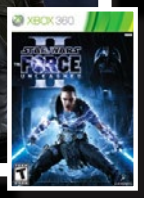
SKETCHES OF BRENT ZORICH CLOTHING LINE

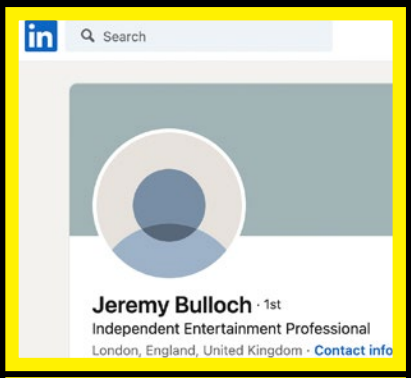
SIGNATURE CHARACTER TECHNICAL DIRECTION

BOBA FETT FEATURED IN "STAR WARS THE FORCE UNLEASHED" FRANCHISES.



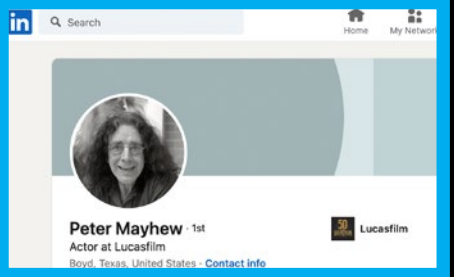


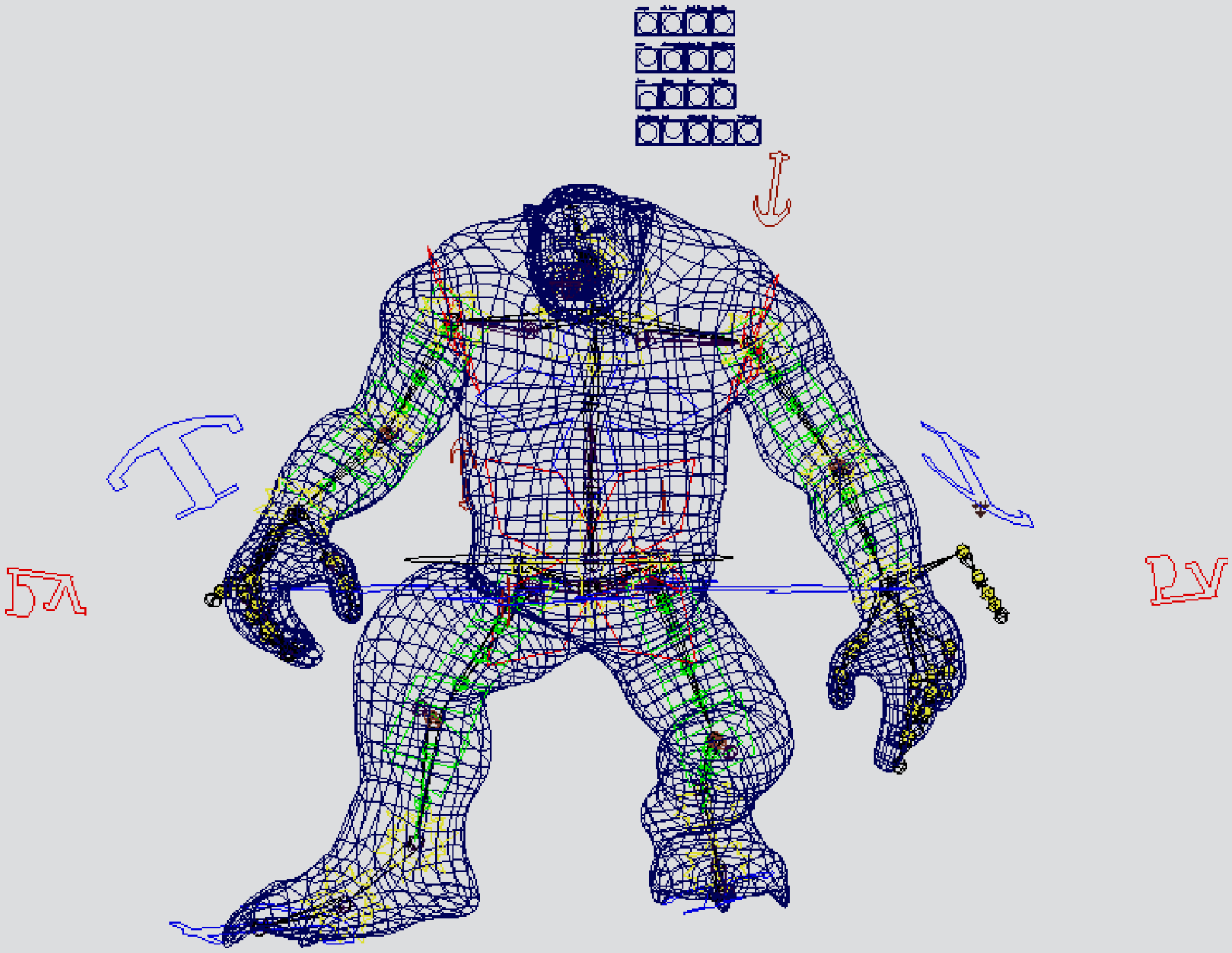




BOBA FETT REFERENCE. ACTOR JEREMY BULLOCH (REST IN PEACE) WHO WAS A LINKEDIN CONTACT AND PLAYED BOBA FETT IN "STAR WARS EPISODE V: THE EMPIRE STRIKES BACK"

IN PARTICULAR THE SCENES ON CLOUD CITY WITH ACTOR PETER MAYHEW WHO PLAYED CHEWBACCA (REST IN PEACE AND ALSO A LINKEDIN CONNECTION)



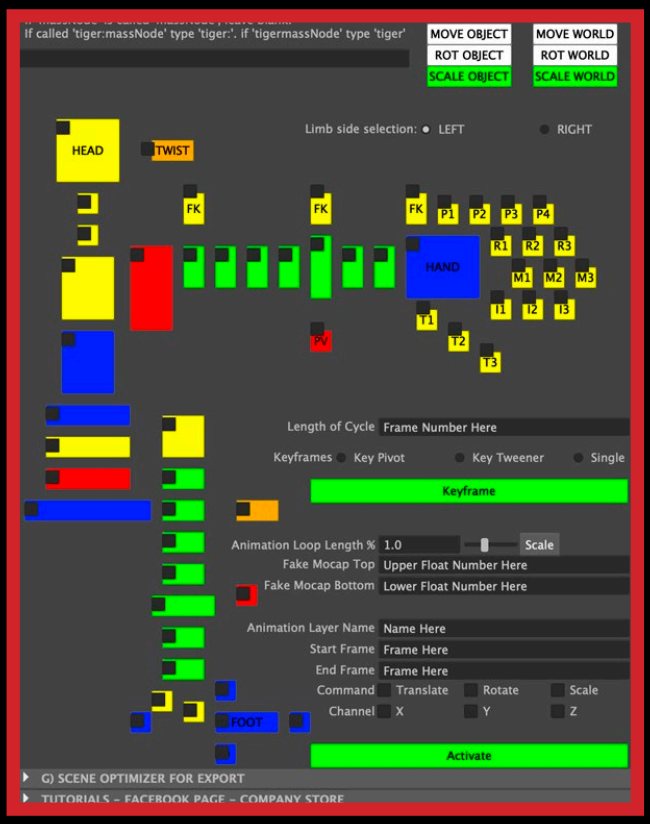


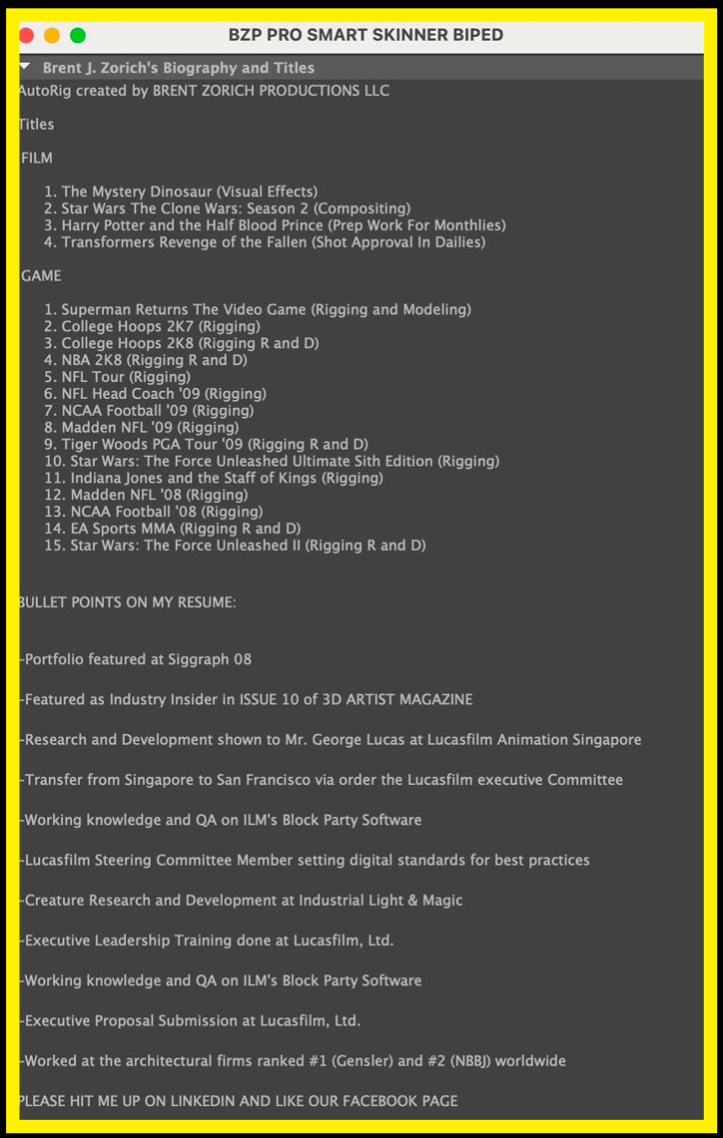
RESEARCH AND DEVELOPMENT

WORK IN PROGRESS :::::: GRAPHIC USER INTERFACE DESIGN OF NEW ANIMATION SYSTEM

THIS IS A PROTOTYPE WIP DESIGN OF A NEW ADDITION TO THE SMART SKINNER TECHNOLOGY THAT I DEVELOPED. ONCE COMPLETED, A WALK OR RUN CYCLE, THAT WOULD TYPICALLY TAKE APPROXIMATELY 35 TO 45 MINUTES TO COMPLETE, SHOULD BE COMPLETED UNDER 5 TO 10 MINUTES, LOOPING. THIS CYCLE WILL BE SCALABLE TO GIVE THE ILLUSION OF A "FASTER" OR "SLOWER" WALK PACE.

THAT COMPLETES THE FIRST PORTION OF THIS R AND D. THE SECOND PORTION, WHICH IS AN ANIMATION DESIGN PROBLEM, IS ADDING THE ENHANCEMENT OF REALISM TO THAT PARTICULAR CYCLE. WHEN ANIMATION IS KEYED BY HAND, THE ARCS OF MOTION OF THE KEYFRAMED WORK TYPICALLY LOOK "HAND DONE" OR SMOOTHED; WHEREAS MOTION CAPTURE ARCS ARE MORE TURBULENT DUE TO THE SUBTLETIES OF MOTION. THIS SOON TO BE DEVELOPED TECHNOLOGY WOULD ADD A "NOISE" LAYER TO A SMOOTHED KEYFRAMED ANIMATION CURVE THAT, IN THEORY, ONCE TESTED, COULD GIVE THE ILLUSION OF A MOTION CAPTURE SHOOT WITH AN ACTOR IN MARKERS... NOT DONE BY HAND. THIS WOULD ENABLE THE ANIMATION DIRECTOR TO APPLY THIS NOISE LAYER TO NON TRADITIONAL PROPORTIONED CHARACTERS THAT WOULD BE PERFORMING ALONGSIDE THEIR MOCAPPED HUMAN PROPORTIONED COUNTERPARTS, ADDING TO A SEAMLESS GAME LOOP, GAME CINEMATIC, OR ANIMATION SHOT. SO FOR EXAMPLE, IN "GOD OF WAR", WHERE KRATOS IS MOTION CAPTURED AND THERE ARE SUBTLETIES IN HIS WALK CYCLE OF HUMAN ERROR, IF HE WERE TO FIGHT A NON PROPORTIONED BIPEDAL OR QUADRUPED CHARACTER THAT IS KEYFRAMED BECAUSE MOTION CAPTURE IS AN IMPROBABILITY, THIS TECHNOLOGY WOULD RUN ON THAT SECOND CHARACTER'S ANIMATION DATA CURVES IN THE GRAPH EDITOR, AND THEN BOTH CHARACTERS WOULD HAVE THE VISUAL APPEARANCE OF BEING MORE REALISTIC WITH MOCAP DATA AS OPPOSED TO ANIMATION SMOOTH KEYED NON REALISM. DIRECTOR ANG LEE WHEN WORKING WITH ILM ON "HULK" IN 2003 MENTIONED ARCS OF MOTION IN THE "MAKING OF," BUT GAMES, DUE TO DROP KEYFRAMES IN REAL TIME ACTION, HAVE NOT YET ADOPTED ALL OF THESE PRINCIPALS... LEADING TO DISBELIEF WHEN YOU PLAY THE TITLES.





SELF PROMOTION ::::: MARK ZUCKERBERG MARKETING STRATEGY

AS APART OF A SELF PROMOTION STRATEGY, THE SOFTWARE THAT WAS ROLLED OUT WORLDWIDE AT APPROXIMATELY 100 LICENSES PER SCHOOL, FOR 250 SCHOOLS, ON 6 CONTINENTS, TO ENHANCE THE CONFIDENCE OF THE USER OF THE PRODUCT, AND SELL THEM ON THE FACT THAT THE TOOL BEING USED IN ACADEMIA WAS AUTHORED BY AN EXPERT, MY VITA WAS A DROPDOWN MENU ON EVERY LICENSE THAT WENT OUT THE DOOR. THOUSANDS OF STUDENTS WORLDWIDE WHO HAD ACCESS TO THIS TECHNOLOGY KNOW EVERYTHING ABOUT MY RESUME. I CAN ALSO SEND MASS EMAILS TO INFORM OF NEW ADVANCEMENTS OR ANY OTHER PERTINENT INFORMATION TO A WHOLE GENERATION OF ART, DESIGN, AND ANIMATION STUDENTS IN A MASS EMAIL IN COUNTRIES RANGING FROM THE USA, TO JAPAN, TO BRAZIL, TO CHINA, TO ENGLAND, TO CANADA, SO ON AND SO FORTH. AN AMAZING ASSET FOR ME TO HAVE IN MY ARSENAL AS I DEVELOP FURTHER PROFESSIONALLY INTO ULTIMATELY A CHIEF VISUAL OFFICER OR STUDIO OWNER EXEC.

SECOND ENTREPRENEURIAL VENTURE

MY CLOTHING LINE

"SKETCHES OF BRENT ZORICH"

(FEATURED IN WALL STREET JOURNAL MARKET WATCH)

APPROACHED BY PR FIRMS OFFERING TO PITCH THE LINE TO "GQ" AND "VOGUE"

ABOUT THIS VENTURE

VENTURE INCEPTION: I am doing QA on Adobe Photoshop for Adobe. Part of doing this I am testing out their software in exchange for advanced copies of Photoshop. Initially, I had dozens of drawings that were digital, adding to that collection every few weeks, that were sketches of designs, both architectural and character, that could be used in a video game as concept. After doing some research, I decided to monetize the drawings by creating an online catalog of both prints and clothing that have the ability to ship online.

MANUFACTURER: The clothing manufacturer is the production company "Art of Where" out of Canada.

MANUFACTURER INVENTORY COST: I do not have a backlog inventory or warehouse. This clothing and print line is all 'print on demand.' I lose no money and only earn what is sold with no back catalog, everything is pure profit.

PROFIT MARGIN: "Art of Where" gets approximately 2/3 of every sale as the manufacturer. I get 1/3.

POINT OF PURCHASE: Both this webpage off of 'www.brentzorich.com' as well as 'www.sketchesofbrentzorich.com' that is connected to a Shopify account.

SHIPPING: "Art of Where" handles all packaging, printing, and shipping.

VENTURE BURN: $700.00 per year. ($600.00 for Shopify and $100.00 for web domain).

VENTURE 'LUST' FACTOR: I am getting multiple emails from numerous PR and marketing agencies in both North America, Europe, and Asia, who see a strong potential in this brand and are wanting to market globally. I have also been approached by clothing manufacturers for Ralph Lauren in Asia wanting to get involved with this venture.

EXIT STRATEGY: Any major clothing manufacturer could purchase the rights of ownership on the original artwork.

ADDRESSABLE MARKET: Anyone on the planet over the age of 18 that has a credit card, internet access, and a standard billable address. Everything is handled online and the logistics are handled with Shopify and 'Art of Where.'

MARKET NICHE: I have made several winnable arguments on this website that if Leonardo DaVinci were alive today, he would not have my resume. In 1500 A.D., if DaVinci had been a big Whig on IP such as Star Wars, Madden NFL, NBA 2K, trained by DreamWorks, and been an architectural designer at the two largest architecture firms in the world with several worldwide magazines, cover included, showcasing his artistic skill set, had he shipped wearable and affordable wall mounted products within his addressable market, I feel people would have purchased his IP; even potentially, once marketed, making them holiday gifts for people of all ages. For example, "honey, I know you're a Star Wars fan, Merry Christmas. This is one of the wearable designs of the best practices steering committee of Lucasfilm that brought Star Wars intellectual property to life."

PURCHASE PROCESS: A potential customer goes on one of the two websites, purchases the product with PayPal or a credit card, Shopify sends an email to the venture email account with an automated button that gets sent to "Art of Where," once the money clears I hit submit on the button which automatically pulls 2/3 of the purchase order from my bank account, that money gets sent to "Art of Where" and they manufacture the printed product on either a print or piece of clothing, then they package and ship the item to the customer.

VENTURE VALUATION: The valuation of this venture for acquisition to the rights of the original digital sketches is 18 million dollars in 2023. This is based on the marketing agency that represents Disney, Google, McDonalds, and Amazon, contacting me and projecting that this venture has potential to pull 500k per month in sales, or 6 million per year. ValuAnalytics, a globally recognized analytics resource, recommends calculating three to four years of forecast when determining venture valuation. I am only doing three. Three times six million in projections per year is 18 million. Note, the artwork acquisition will not include those pieces created at The Central Ohio Art Academy in the collection. That original artwork will sell independently.

Sketches of Brent Zorich

... A CASUAL CLOTHING LINE FOR EVERY ARTIST ... ARCHITECT ... ENGINEER ... DESIGNER ... AND ILLUSTRATOR WITHIN US ...

WWW.SKETCHESOFBRENTZORICH.COM

CLOTHING COMES IN A VARIETY OF SIZES AND COLORS

THE DESIGNS ON THE T-SHIRTS ARE QUICK CONCEPT SKETCHES THAT, FOR EXAMPLE, IN A CRITIQUE SESSION AT A STUDIO LIKE ILM, WOULD ESTABLISH A ROUGH FORM THAT WOULD BE BROUGHT INTO A SCULPTING SOFTWARE, LIKE MUDBOX, TO ADD A Z-AXIS (DEPTH), AND THEN INTO MAYA TO ADD PLANES TO FINALIZE STRUCTURE. THE WHOLE PROCESS FROM FIRST INCEPTION WITH IPAD AND PEN, TO BEING PREPARED TO SHOW GEORGE LUCAS FOR REVIEW, SHOULD TAKE NO MORE THAN FIVE HOURS. THE SKETCHES ESTABLISH QUICK FORM IN A PROCESS THAT IS MORE "SCULPTURAL" AS OPPOSED TO ESTABLISHING A BUILDING WORKFLOW PROGRAM THAT WOULD ADHERE TOWARDS GEORGE LUCAS' THREE SECOND RULE AS A DESIGN PROBLEM AS APPLIES TO FILM AND GAME. WAYFINDING ASPECTS THAT WOULD BE INCORPORATED INTO THESE SHAPES FOR A VIDEO GAME LEVEL ARE NOT ESTABLISHED IN THIS PROCEDURE. THIS PROCESS I HOPE TO IMPLEMENT IN THE CLASSROOM AS A PROFESSOR, PART TIME, AT HARVARD ONE SEMESTER EVERY THREE YEARS IN THE DIGITAL DESIGN DEPARTMENT. IT IS MY HOPE THAT THESE DESIGNS RESONATE WITHIN EACH PERSON AND THEY CAN EXPRESS THEMSELVES THROUGH MY WORK.

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Home

Press Release

Tech entrepreneur Brent Zorich unveils exciting apparel company shaped by experience at Lucasfilm

Published: Aug. 31, 2021 at 9:12 a.m. ET

Aug 31, 2021 (AB Digital via COMTEX) -- "Sketches of Brent Zorich" is an apparel company created to share the designs and artwork of tech entrepreneur, Brent J. Zorich, who has worked at the largest architecture, animation, visual effects, and video game companies worldwide. Brent is a globally published tech entrepreneur and venture capital presenter, who has lived in both North America and Asia, and named as 'One of the Top 100 Global People in Tech and Innovation' by the Intercon Conference sponsored by Facebook and Amazon.

Zorich licensed auto rigging software that he authored that completes 80 hours of rigging work in 15 minutes to 250 universities on six continents. His LLC, BZP Pro, was under acquisition review five times with three separate Fortune 500 companies whose deals were brokered by a Goldman Sachs alum of Harvard. After he raised investment money from a banking alum of Harvard and Yale, he had booths at Siggraph and GDC where he got endorsed for his technology by The Siggraph Chair publicly as 'mind-blowing', and that work was featured on the cover of Worldwide Magazine, 3D Artist Magazine.

THE WALL STREET JOURNAL.

Brent specializes in designing modular rigging engineering systems to automate characters like Buckbeak in 'Harry Potter and the Prisoner of Azkaban'. Zorich did something similar to that previously at Lucasfilm/ LucasArts/ Industrial Light & Magic, where he also frequented The Skywalker Ranch, was The Best Practices Review Committee selected by the former CTO of Peter Jackson's Weta Digital (The Lord of the Rings), an executive trainee, worked on the intellectual property of Star Wars: in particular the rigs of Boba Fett, Jabba the Hutt, Ultimate Evil (The cover character of Star Wars The Force Unleashed), and converging ILM's Jango Fett with Lucasfilm Animation Singapore's Ahsoka Tano on the Xbox, which was shown directly to George Lucas in the late 2000s. Other Lucasfilm IP included Steven Spielberg (Indiana Jones and The Staff of Kings), Michael Bay (Transformers Revenge Of The Fallen), and JK Rowling (Harry Potter and The Half-Blood Prince).

EA Sports (where he redesigned the rigging system on their top title, Madden NFL, and NCAA Football, as well as attending global rigging research and development on Fifa, Facebreaker, NHL, EA Harry Potter, and Tiger Woods PGA) and Take Two Interactive (NBA 2K with rigging tests done on Shaquille O'Neal motions) were also previous employers. At ACCAD (where CGI was invented in the 1960s) at The Ohio State University, for his master's degree, he was in The DreamWorks Outreach Program focusing studies in technical animation while being trained from supervisors on such films as Shrek, Madagascar, Finding Nemo, Shark Tale, and Spider-Man 2, with attending a lecture session by the "K" in DreamWorks SKG: Jeffrey Katzenberg. This training at ACCAD was applied to a one hour long Jurassic Park oriented dinosaur special that aired on The Discovery Channel where he worked in coordination with paleontologists from The Burpee Museum in Rockford, Illinois, who worked with Spielberg's dinosaur crew on Jurassic Park.

Zorich's master's thesis focused on auto rigging dinosaurs in the programming language Python. Brent also does concept illustration work (QA on Adobe Photoshop for Adobe's Apple iPad team via illustrations), and was formerly an interior architect for the two largest architectural firms in the world: #1 Gensler and #2 NBBJ with clients such as Adidas, Volkswagen, and The Republic of China. Most recently Brent was subcontracted rigging prototyping work from Sony Pictures involving The Marvel Cinematic Universe and Walt Disney Feature Animation, while taking continuing studies at Stanford University in linear algebra and engineering. His undergrad degree from Ohio State was in industrial design where he focused on independent projects for Nike and Reebok. Brent looks forward to sharing his art and designs with the whole planet. Brent's eventual goal is to become a Chief Visual Officer at a major VFX, video game, or animation studio.

SAMPLE ADVERTISEMENT ARTICLE MENTIONED NEXT TO THE S & P 500: WALL STREET JOURNAL'S MARKET WATCH

AS SEEN IN THE FOLLOWING

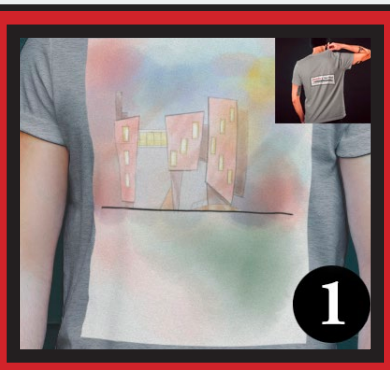
WSJ · 3DArtist · FOX NEWS · CBS · NBC · USA TODAY

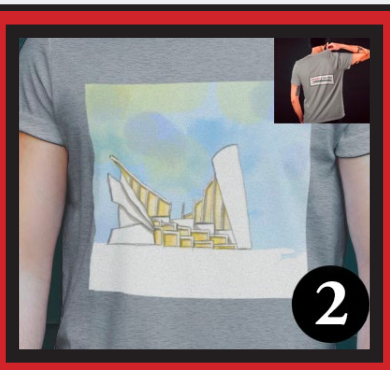
Sketches of Brent Zorich

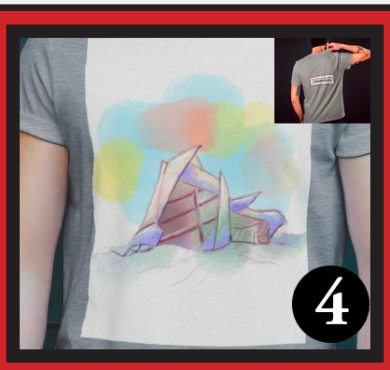
... A CASUAL CLOTHING LINE FOR EVERY ARTIST ... ARCHITECT ... ENGINEER ... DESIGNER ... AND ILLUSTRATOR WITHIN US ...

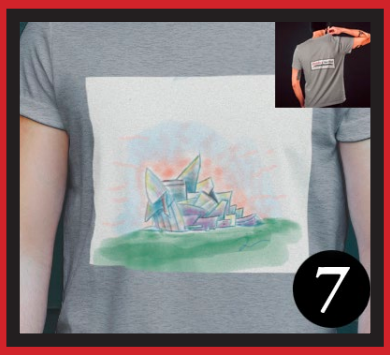
WWW.SKETCHESOFBRENTZORICH.COM

CLOTHING COMES IN A VARIETY OF SIZES AND COLORS









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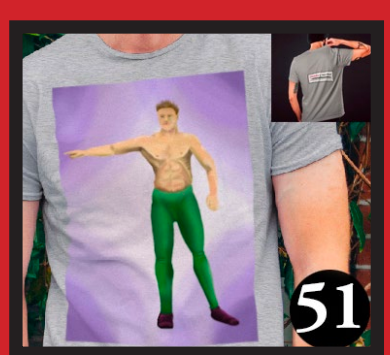
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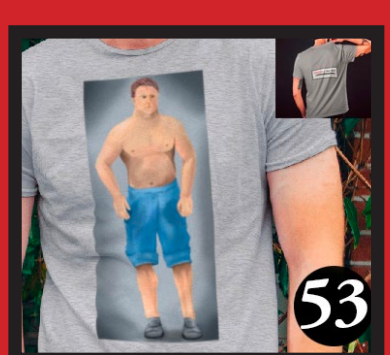
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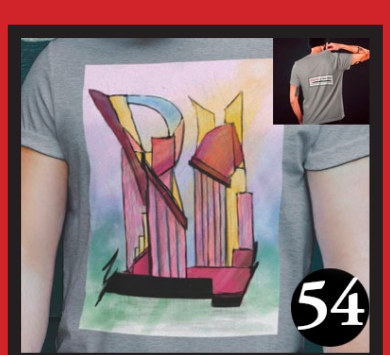
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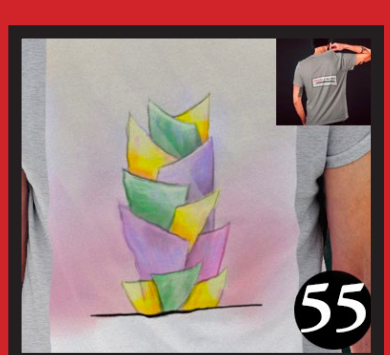
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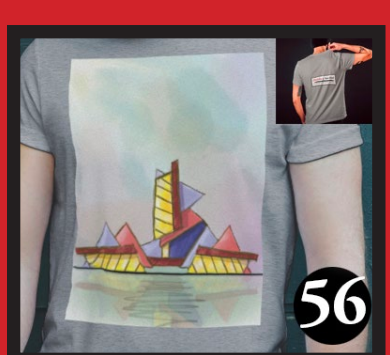
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THE PRODUCT LINE BEING CONTACTED BY THE PR FIRM OF DISNEY, GOOGLE, FACEBOOK, AND AMAZON, CLAIMING THEY SEE THE POTENTIAL OF THIS LINE EARNING $500,000 A MONTH

To You

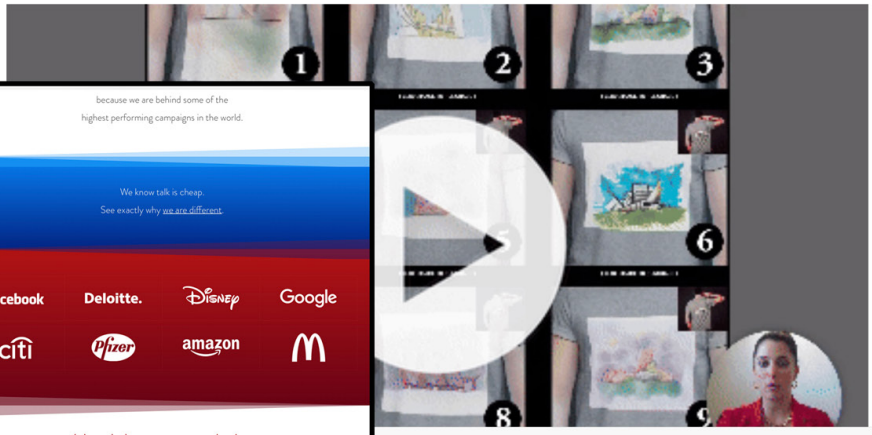
Hi Brent, I hope you're having a marvelous day!

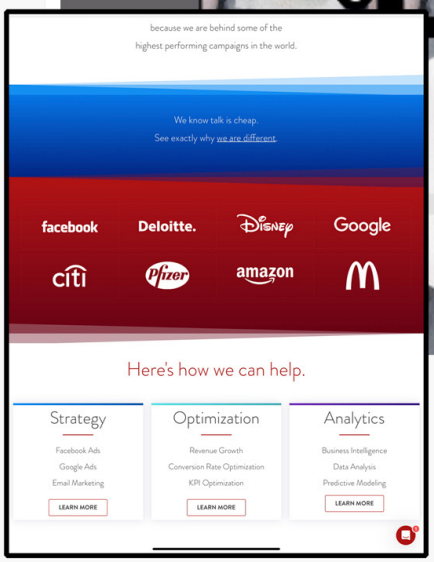
I love the look & feel of Sketches Of Brent Zorich. You guys really catch the eye.

My team and I took the time to look into your brand. We are confident we can help you add $100k - $500k in monthly recurring revenue within 6-9 months.

The best part is.... if we don't deliver, you don't pay! We work on a pay on results basis, so if you don't get results, we don't get paid.

By the way, this isn't some automated message. I'm a real human! I even recorded a quick video to introduce myself and so you can see I'm not blasting you from some software.





BRANDS THIS PARTICULAR AGENCY WORKS WITH

Mail Calendar Feed Apps

PRINTS

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Sketches of Brent
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Sketches of Brent
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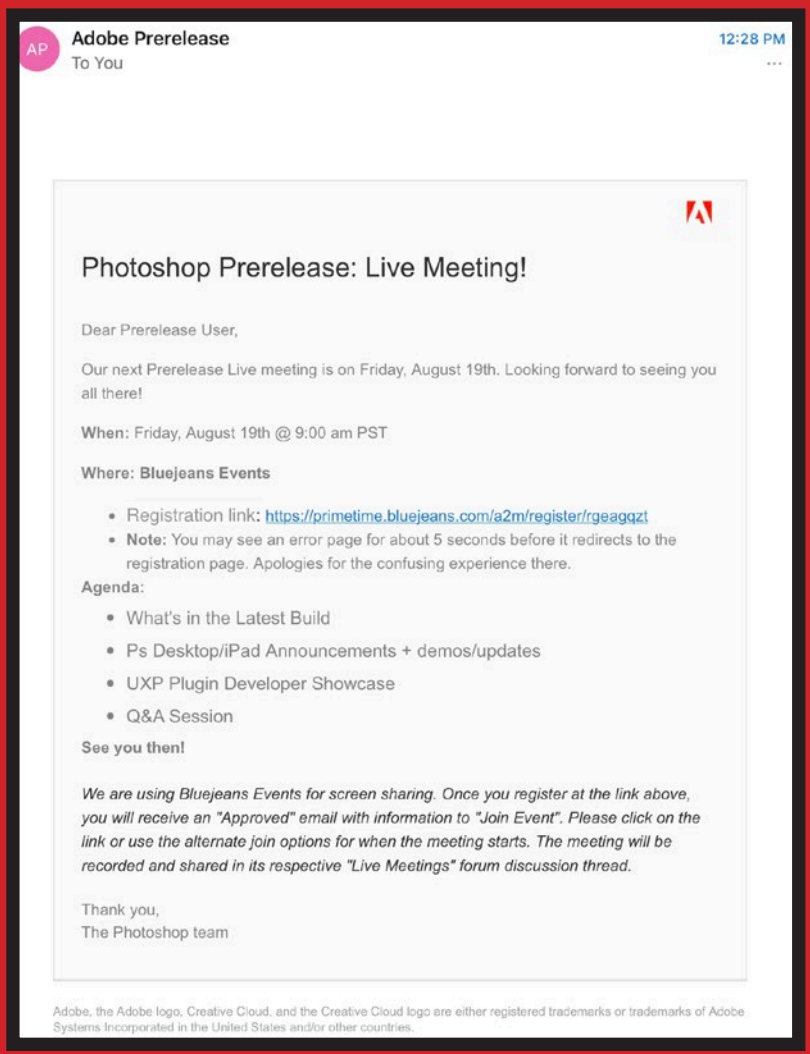
HOODIE DESIGNS

DRAWINGS ARE DONE AS A PART OF THE ADOBE PRE RELEASE TEAM ON THE IPAD WITH ADOBE PHOTOSHOP.

Adobe



AP Adobe Prerelease 12:28 PM
To You

Photoshop Prerelease: Live Meeting!

Dear Prerelease User,

Our next Prerelease Live meeting is on Friday, August 19th. Looking forward to seeing you all there!

When: Friday, August 19th @ 9:00 am PST

Where: Bluejeans Events

- Registration link: https://primetime.bluejeans.com/a2m/register/rgeagqzt
- **Note:** You may see an error page for about 5 seconds before it redirects to the registration page. Apologies for the confusing experience there.

Agenda:

- What's in the Latest Build
- Ps Desktop/iPad Announcements + demos/updates
- UXP Plugin Developer Showcase
- Q&A Session

See you then!

We are using Bluejeans Events for screen sharing. Once you register at the link above, you will receive an "Approved" email with information to "Join Event". Please click on the link or use the alternate join options for when the meeting starts. The meeting will be recorded and shared in its respective "Live Meetings" forum discussion thread.

Thank you,
The Photoshop team

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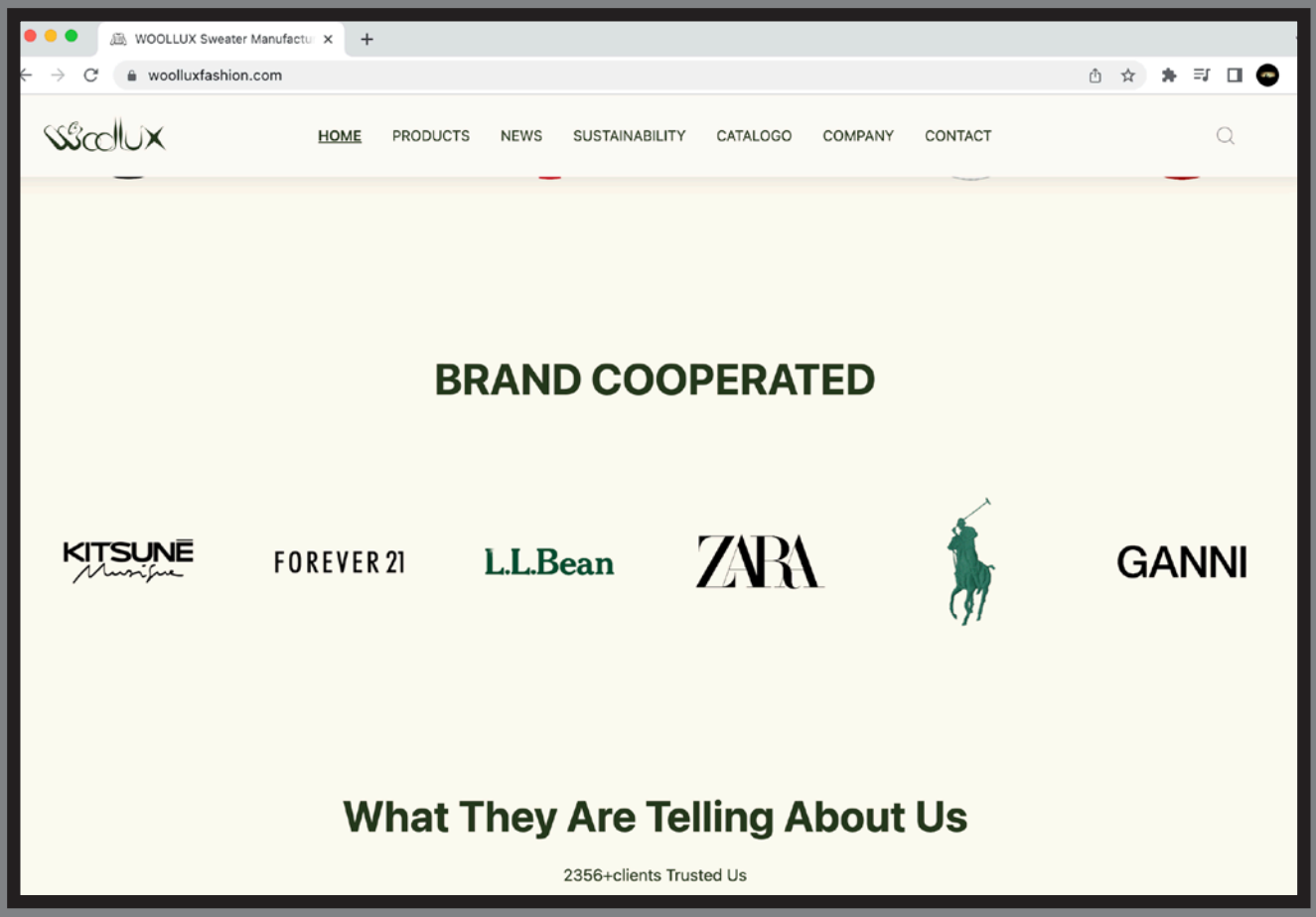
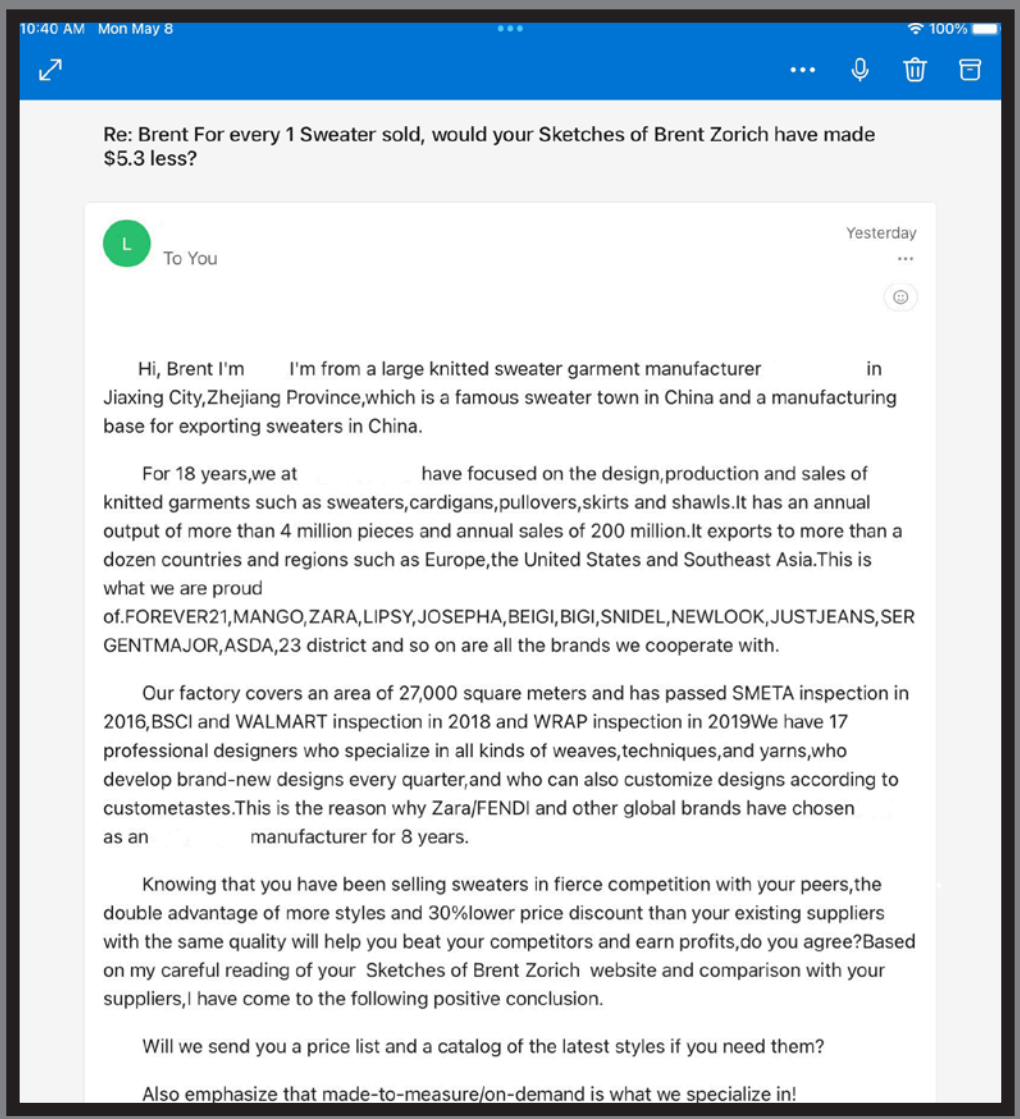
DUE TO NAME AND GLOBAL REPUTATION, RALPH LAUREN'S CLOTHING MANUFACTURER IN CHINA HAS CONTACTED ABOUT PRODUCTION OF THE BRAND





10:40 AM Mon May 8 100%

Re: Brent For every 1 Sweater sold, would your Sketches of Brent Zorich have made $5.3 less?

L To You Yesterday

Hi, Brent I'm I'm from a large knitted sweater garment manufacturer in Jiaxing City,Zhejiang Province,which is a famous sweater town in China and a manufacturing base for exporting sweaters in China.

For 18 years,we at have focused on the design,production and sales of knitted garments such as sweaters,cardigans,pullovers,skirts and shawls.It has an annual output of more than 4 million pieces and annual sales of 200 million.It exports to more than a dozen countries and regions such as Europe,the United States and Southeast Asia.This is what we are proud of.FOREVER21,MANGO,ZARA,LIPSY,JOSEPHA,BEIGI,BIGI,SNIDEL,NEWLOOK,JUSTJEANS,SERGENTMAJOR,ASDA,23 district and so on are all the brands we cooperate with.

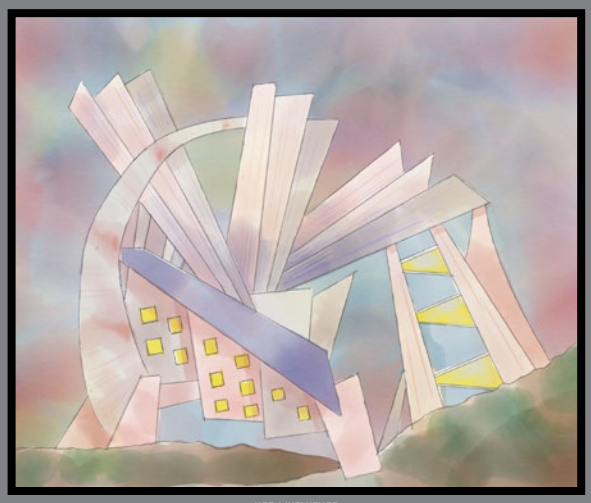
Our factory covers an area of 27,000 square meters and has passed SMETA inspection in 2016,BSCI and WALMART inspection in 2018 and WRAP inspection in 2019We have 17 professional designers who specialize in all kinds of weaves,techniques,and yarns,who develop brand-new designs every quarter,and who can also customize designs according to custometastes.This is the reason why Zara/FENDI and other global brands have chosen as an manufacturer for 8 years.

Knowing that you have been selling sweaters in fierce competition with your peers,the double advantage of more styles and 30%lower price discount than your existing suppliers with the same quality will help you beat your competitors and earn profits,do you agree?Based on my careful reading of your Sketches of Brent Zorich website and comparison with your suppliers,I have come to the following positive conclusion.

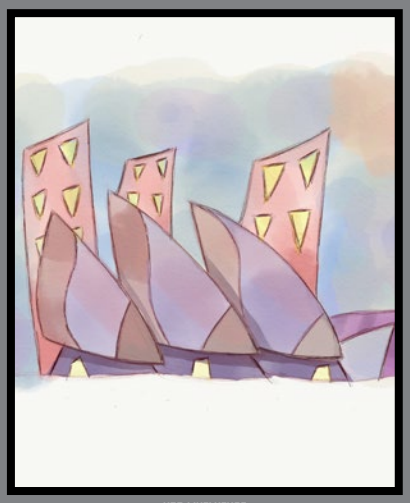
Will we send you a price list and a catalog of the latest styles if you need them?

Also emphasize that made-to-measure/on-demand is what we specialize in!

KEY 1.5 HOUR SKETCHES ON THE IPAD FOR THE CLOTHING LINE THAT COULD BE QUICK CONCEPTS FOR A GAME



NBBJ INFLUENCE



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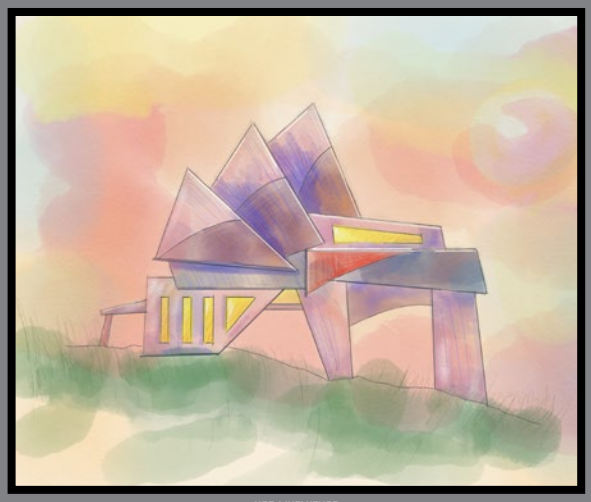

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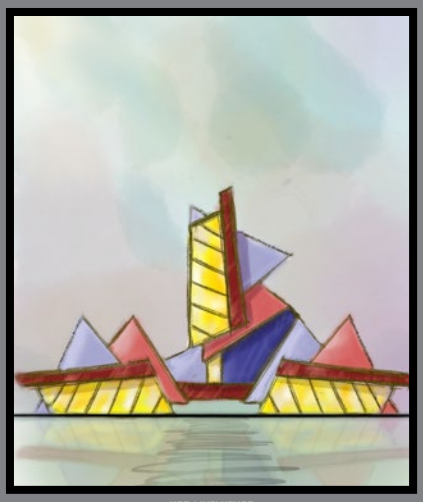
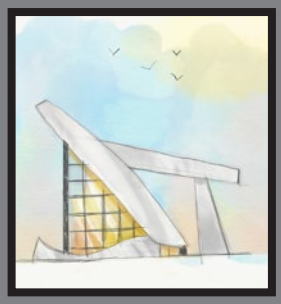


NBBJ INFLUENCE

HALO INFLUENCE



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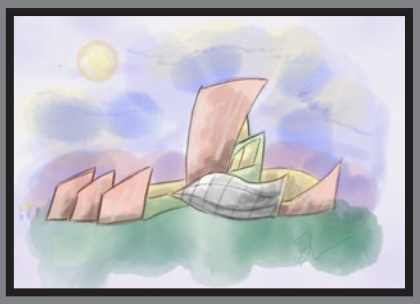
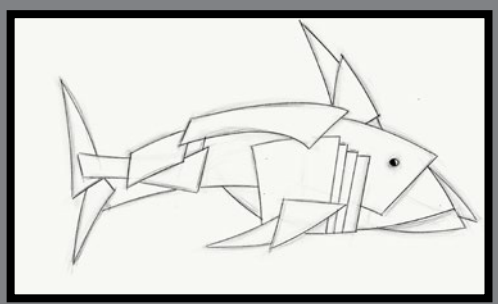


GEHRY INFLUENCE

GEHRY INFLUENCE

TOLKIEN INFLUENCE

GENSLER INFLUENCE



GEHRY INFLUENCE

AMATEUR ARTWORK

FOR ARCHIVAL PURPOSES

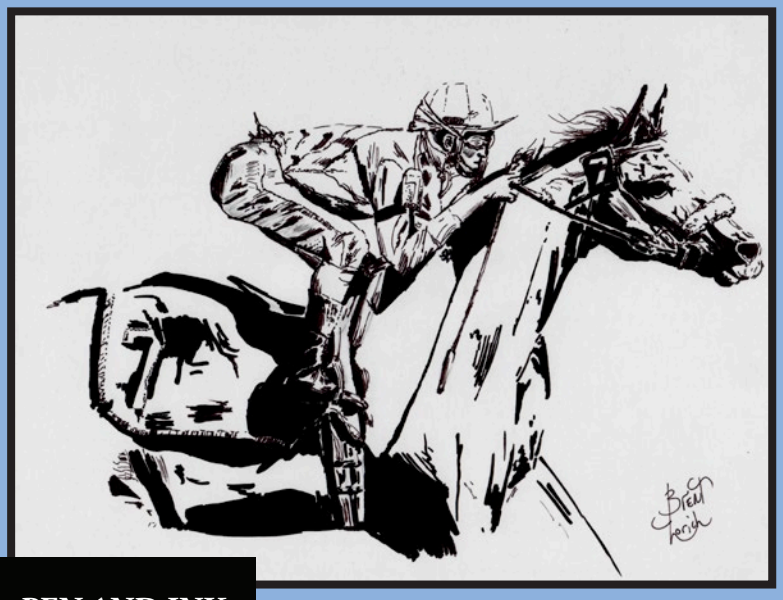
NOT TO BE CONSIDERED FOR REVIEW IN ARTISTIC OR ENGINEERING CONTRACT NEGOTIATION

PEN AND INK

11TH GRADE

COLOR PENCIL

5TH GRADE



PEN AND INK

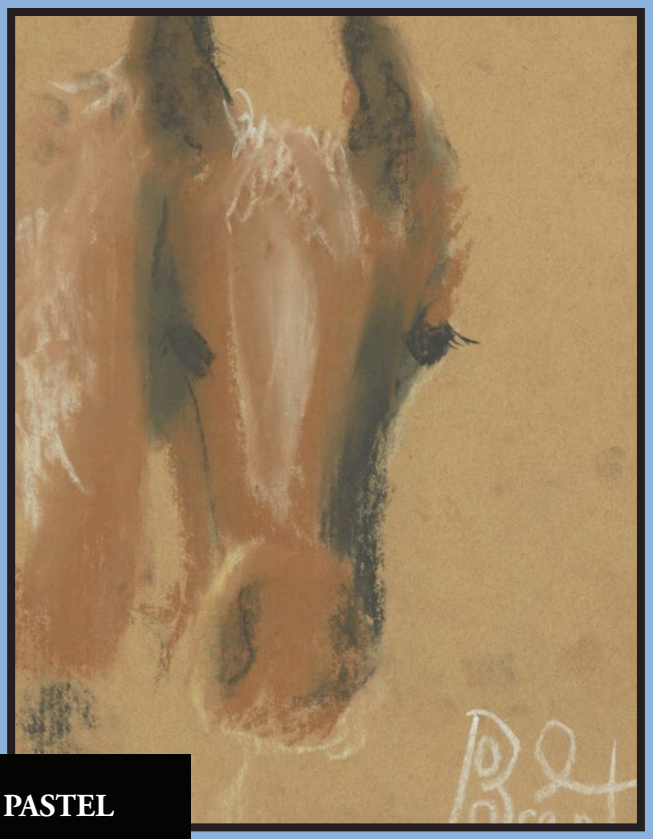
10TH GRADE

PENCIL

11TH GRADE

COLOR PENCIL

2ND GRADE

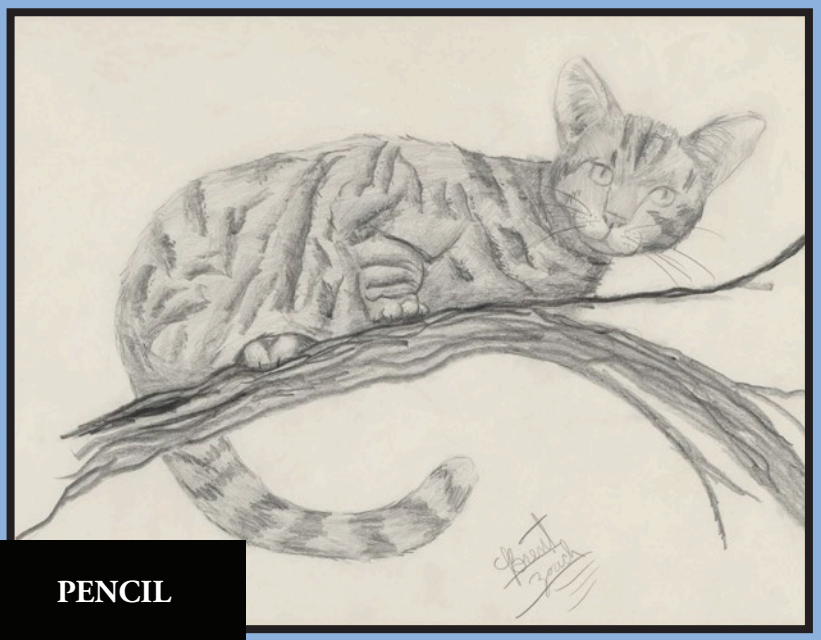


PASTEL

2ND GRADE

PENCIL

4TH GRADE



PENCIL

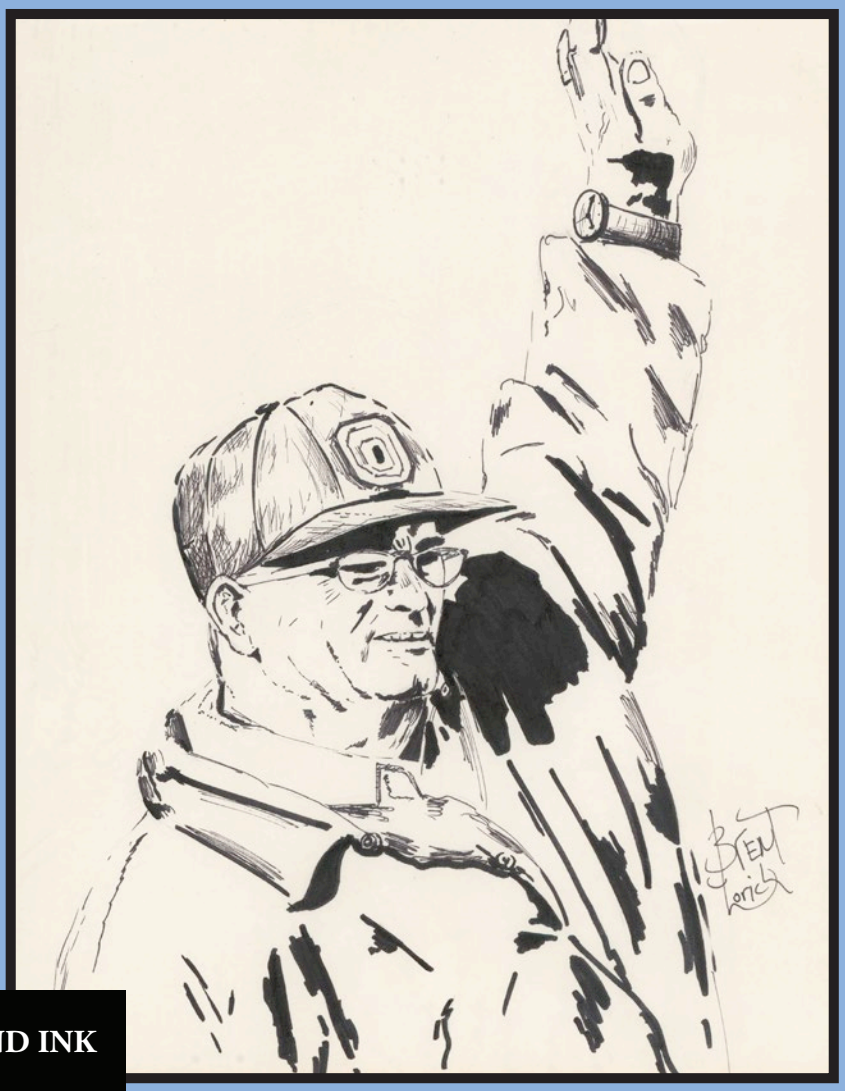
3RD GRADE

ACRYLIC

9TH GRADE

OIL PAINT

5TH GRADE



PEN AND INK

9TH GRADE

OIL PAINT

6TH GRADE

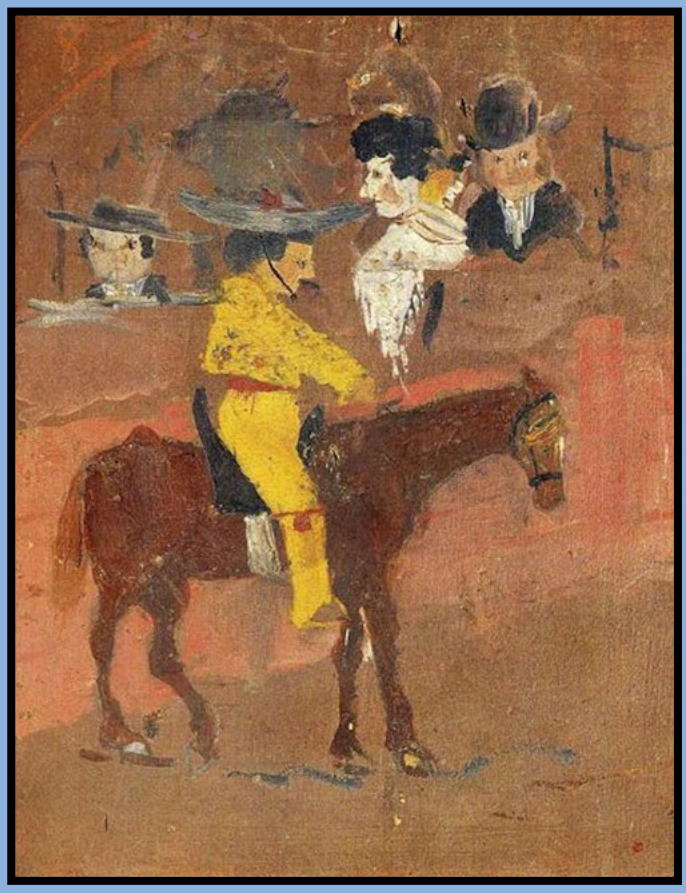
OIL PAINT

8TH GRADE

ZORICH

OIL PAINT

1ST GRADE



PICASSO

OIL PAINT

3RD GRADE

Pablo Picasso is one of, if not, greatest painters and artists of all time. It is only natural, when assessing the artistic skill set of Brent's early work, that a side by side comparison be executed to determine comparable talents. On the right, is Picasso's earliest captured work at 9 years old. On the left, is a scan of Brent's earliest work at 7 years old. As you can see, at that early age, Brent's "snake" at 7 years old shows a skill set that surpasses Picasso at 9. Picasso went on to be one of the greatest painters ever, however, comparing him to Brent might not be a fair assumption because unlike Picasso, Brent does not paint every day, so his skill set is subdivided in design engineering, industrial design, architectural design, engineering programming, and illustration. Brent is not Picasso... he is Leonardo DaVinci... just as much a scientist as an artist. This will be key in assessing value when staffing for the creative portion of a computer graphics project: both as an independent contract, and as a staff chief visual officer that can earn more than ten million per year. Note, with the overall surpassed skill set of Picasso in non painted categories, Pablo Picasso's work at times has sold for up to 100 million dollars per piece.

NIKE DESIGN THESIS

THIS PROJECT GOT BRENT THE TOP TWO ARCHITECTURE FIRMS IN THE WORLD

WITH THIS KNOWLEDGE AS A POTENTIAL CHIEF VISUAL OFFICER AND IN BETWEEN HIS COMPUTER GRAPHICS TASKS, THIS WOULD ASSIST BRENT AT A COMPANY LIKE AN ELECTRONIC ARTS, PLAYSTATION, XBOX, ETC, IN DESIGNING KIOSKS AND LAYOUT PLANS FOR THE VIDED GAME TITLES HE IS WORKING ON IN MAJOR RETAILERS LIKE WAL-MART OR BEST BUY.

“I CAN”

MIDWEST

identify

Recognize the problem.

NEGATIVE PUBLICITY

"Taking A Look Inside Nike's Factories"

"Made In Vietnam: The American Sneaker Controversy"

"Nike, Inc. Announces Details of U.S. Job Reductions."

Create objectives.

Increase corporate profit.

Identify consumer needs.

Recreate identity to fit needs.

Create environment which strengthens corporate relations with consumer.

explore

Research client.

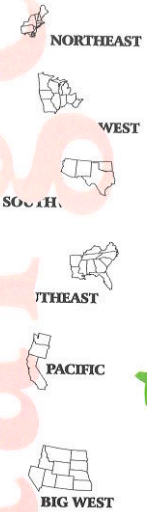
Evaluate the competition.

Survey public interest.

target

Isolate consumer.

Breakdown consumers needs regionally and create an environment designed to suite them.



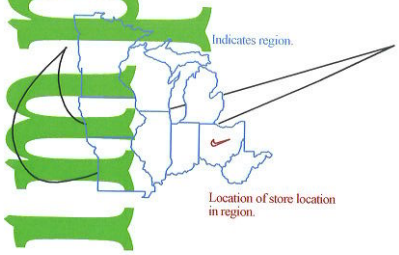
implement

Create solution.

NIKE MIDWEST

The Midwest would include the following states: West Virginia, Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, and Missouri.

The merchandise in this particular store would appeal to the people of this area. The Midwest is strongly represented by Nike apparel. Just these schools alone, Ohio State and Michigan, are always big sellers throughout the country, let alone in this region. Not to mention the amount of golf played in the area; Tiger Woods' clothing line would be a massive seller. Then, there is of coarse Chicago- home of the all time money maker, Michael Jordan. Imagine how happy people in the Midwest would be if they knew they wouldn't have to drive all the way to downtown Chicago, fight parking, and then walk to Niketown on Michigan Ave. just to get some of the exclusive Nike products. They could just go to a mall that is closer to their geographic area that is stocked with merchandise suited for their needs.



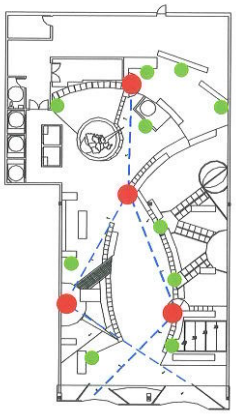
The space is strategically designed to lead people through by means of using visual elements. Architectural shapes placed throughout the space guide consumers around the interior. The merchandise is then placed around these areas as opposed to being "thrown" right into the consumers face. Apparel works with the interior, it does not work against it.

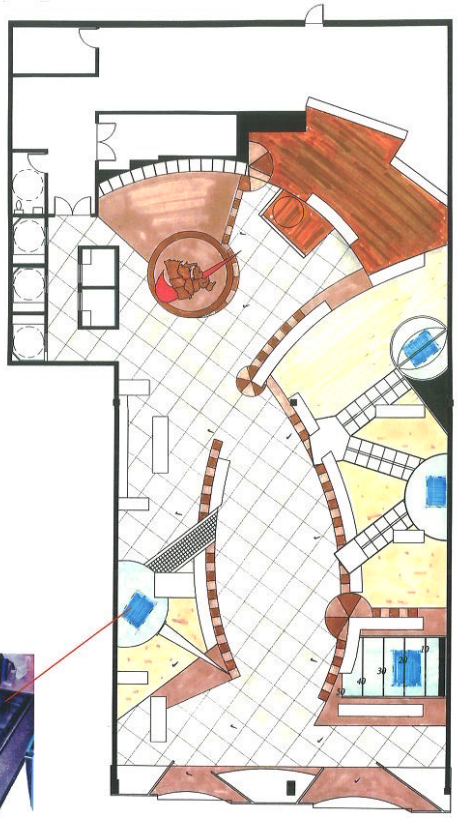
Two more popular sports in central Ohio are golf and football. This is why the golf and football merchandise is placed in the front of the store. These areas entice consumers to begin their journey into the coves. Since tennis merchandise is not as high a seller in this region as the other sports, it is connected to golf. The consumer has to walk right through the tennis area in order to return to the main walkway without backtracking. Baseball is sandwiched between two very high regional sellers, football and basketball. So, in order for consumers to look at apparel from Barry Sanders and Michael Jordan, they have to walk through the section selling baseball.

High selling merchandise in this store will be the team apparel. People in Columbus are Ohio State fanatics. This is why the most popular section, "Team Sports", is placed in the rear of the store. Nationally, according to CNN's Moneyline, the highest selling apparel is cross-training. Customers must walk through the entire space, through all of the other merchandise, in order to get to this section.

Placed throughout the spaces as apart of a marketing tactic are video monitors on the floor. Now when customers see a "Tiger Woods oxford", they can see that same shirt on their favorite golfer while he's winning the Masters Tournament. The customer is not only buying a shirt, he's buying a piece of a championship.

The materials used throughout the space are primarily warm, inviting, colors from an "autumn/ harvest" color palette that will create a soothing, user friendly environment for shoppers. The colors are strong enough to create a visual dynamic between between spaces but subtle enough as to not draw attention away from the merchandise being sold.

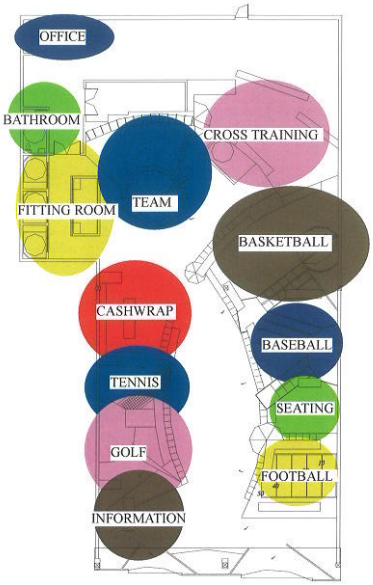


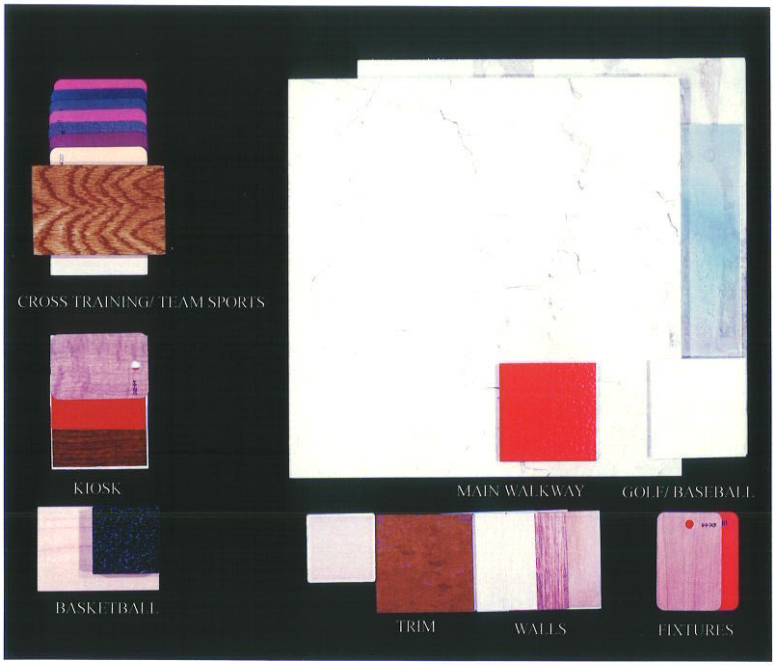


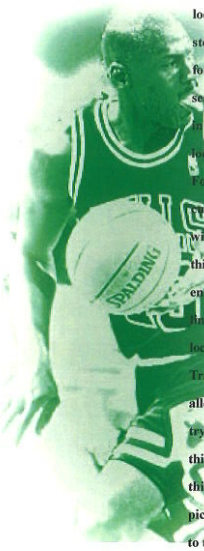
Movement Pattern

Primary Visual Element
(three- dimensionsal piece)

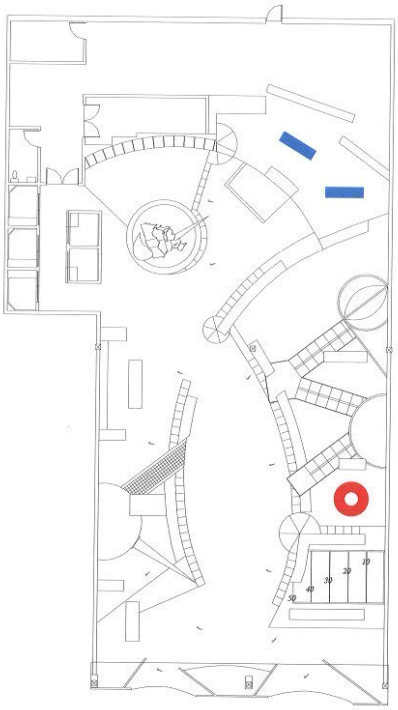
Secondary Visual Element
(two dimensional lifestyle graphic)







Seating is placed in strategic locations throughout the interior of the store to provide intermediate comfort for the shoppers in the space. The first seating line, which is to be upholstered in black leather, is by Lee Jofa and is located in the interactive area between Football and Baseball. The plush cushions and wide variety of shapes will present a number of ways to make this kiosk territory a fun, relaxing, and entertaining atmosphere. The second line of seating by Landscape Forms is located in the rear of the store, in Cross Training. This product's function is to allow customers a place to sit when trying on footwear, which is located in this section. One would generally find this product in a park. This line was picked because if its strong reference to the wilderness.

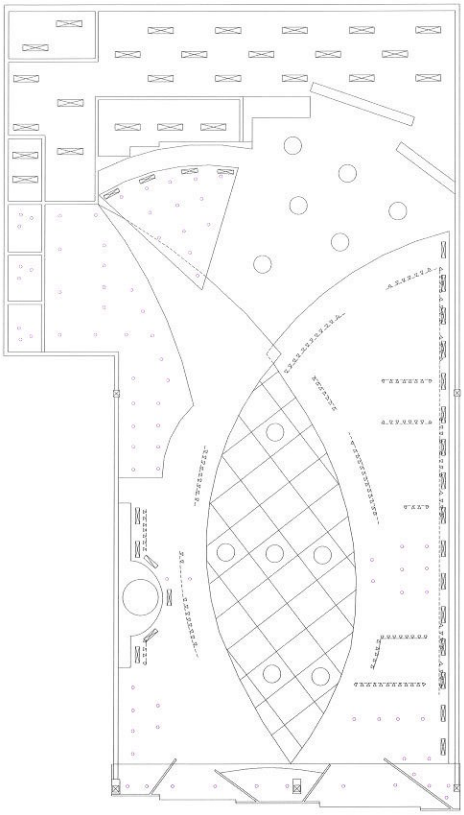


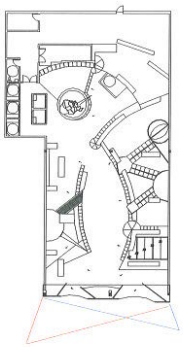
Lee Jofa

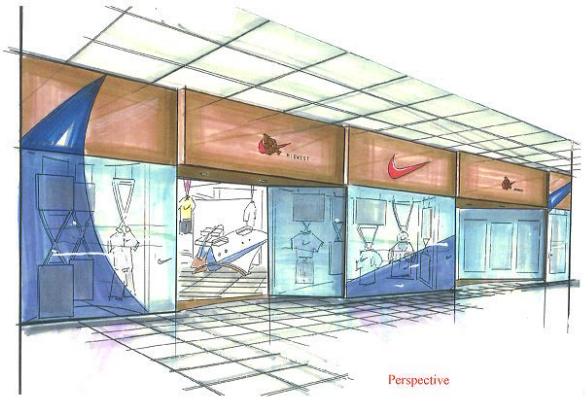
Landscape Forms

The ceiling is a complex, unique, body of mass that not only extenuates the merchandise but adds a dynamic element to the overall design. Certain parts of the ceiling plane drop to add intimacy to separate areas of the store. In order to maintain an openness within the interior, other sections of the ceiling, like the main walkway, were exposed allowing plenty of breathing room. Cable wires shooting between the two main ceiling planes create a grid hovering over the main walkway in which merchandise is suspended.

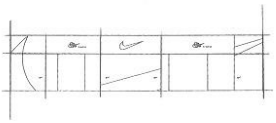
The lighting used within the merchandise able section of the store is incandescent. Track lighting is used in the separate coves to provide unlimited lighting variations. Flourescent lighting is used in the stockroom and office areas.







Perspective

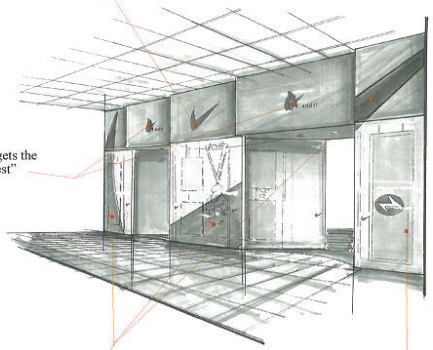


Perspective

The results of the extensive research revealed that consumers were more attracted to entrances that are not symetric. Based on these results, the store front undulates forward to create an imbalance in the entrance. The doorways of the store are slightly shifted to create more diversity in the appearance.

The angles of the glass were strategically placed in order to give a maximum amount of room for frontal display. The glass panels are angles to provide visual stopping power. All Nike apparrel and merchandise can be viewed at virtually every perspective when walking past the store in the mall. Merchandisers working in the store can use these three seperate glass fronts to display the latest gear in the Nike collection. The "swoosh" is placed in the center of the storefront to reinforce brand identity and promote the exclusive Nike name. Over each of the two doorways is the Nike Midwest trademark which identifies the space as a specialty Midwest store to the target group, the "Midwest consumer." Finally, extending through the three window faces of the store is large, light purple "swoosh" connecting the three seperate entities into one solid object.

The "Swoosh" identifies the space as an exclusive Nike store and reinforces the brand identity.

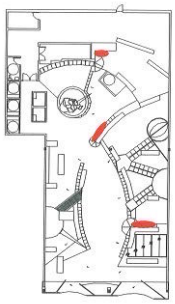


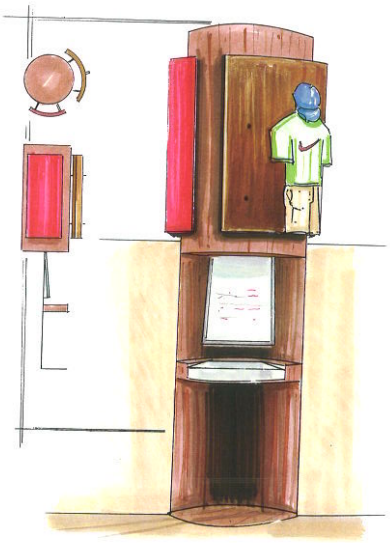
"Nike Midwest" logo targets the user group of the "Midwest" region.

Seperate display areas such as this throughout the storefront feature the latest Nike gear, promotions, and apparrel.

Swoosh used a visual connection for the three seperate faces.

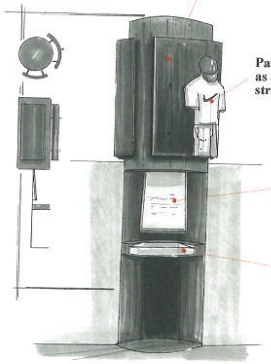
INTERACTIVE KIOSK





Throughout the space are these interactive kiosk systems that allow customers access to the entire Nike catalogue, the world wide web, and Nike "chat rooms." The "chat rooms" allow customers from all of the specialty stores throughout the country to have conversations with one another. For example, a shopper at the Nike Midwest Columbus store can have a conversation with someone from the Nike Southeast Raleigh location.

The kiosk, in order to maintain the Midwest Autumn theme, is designed to have the characteristics of a tree. Because this is a focal feature in the space that shoppers will be looking at and interacting with, it is merchandised with apparel. The merchandise compliments the kiosk without taking away from its function. The red panels located in the upper section of the system are designed to draw attention to the fixture. These panels are used as visual elements, as shown in the interior perspectives, to guide people throughout the space. Nike, the world is going interactive. Be the pioneer that introduces this type of system in a retail environment.



CHAT ROOM

COLUMBUS01: go bucks

ANN ARBOR04: go wolverines

RALEIGH03: both you guys need to grow up

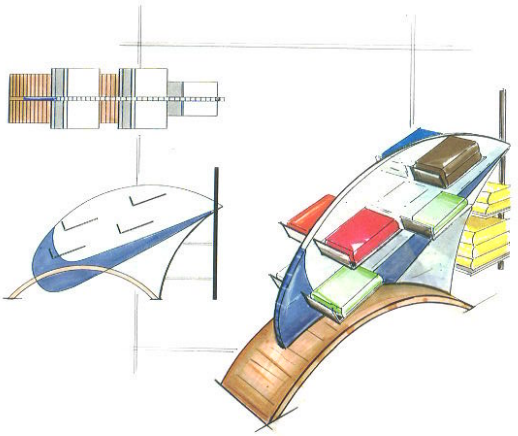
COLUMBUS01: undefeatable

RALEIGH03: ACC is the best

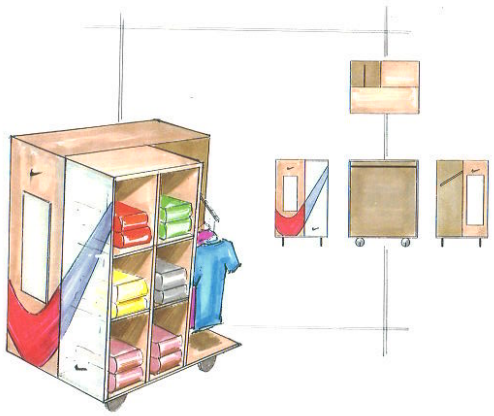
COLUMBUS02: Big 10 all the way

ONLINE ACCESS

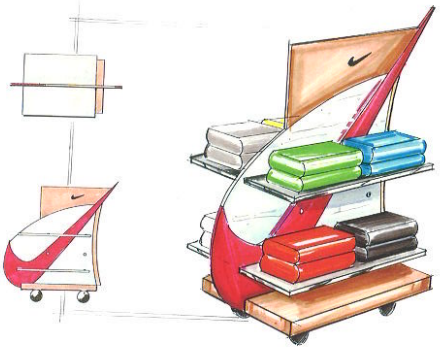
Standing Swoosh

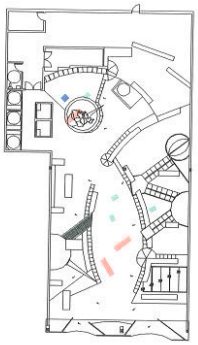


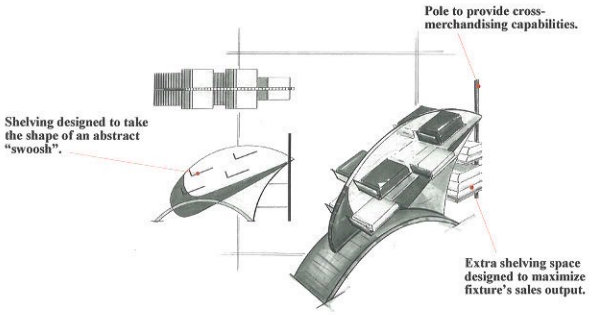
Geometric Swoosh



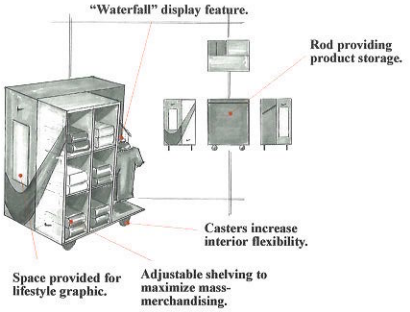
Nike Roller

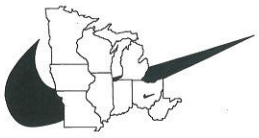


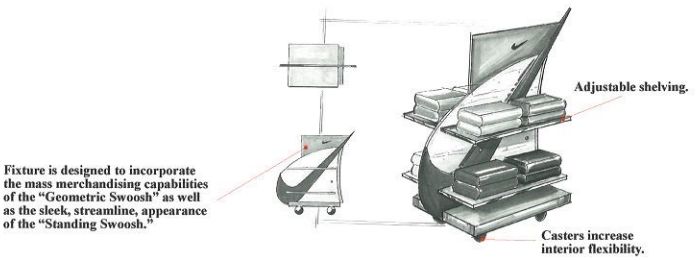


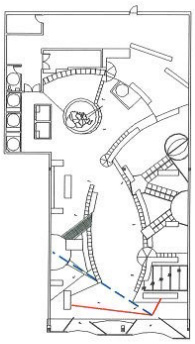


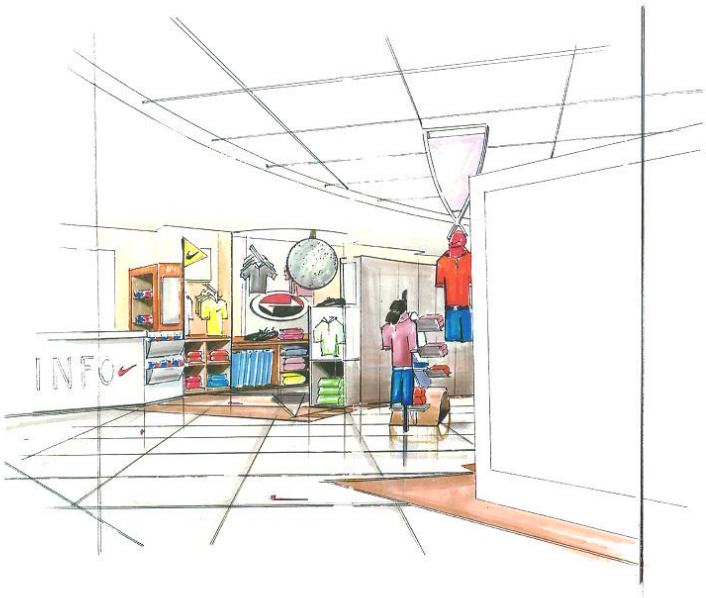
The fixtures are designed to be flexible, functional, and powerful three dimensional objects within the space. The Geometric Swoosh has a "boxy" appearance because it is a mass merchandiser. The function of the Standing Swoosh is to work more as a spacial dilineator that channels customers throughout the space. Purple is a soothing color that will serve as a sedative to customers approaching this fixture for merchandise. Because the Nike Roller is much smaller in size than the Standing Swoosh, red was used to accent the clothing. The red "swoosh" will draw attention to the clothing placed around it.



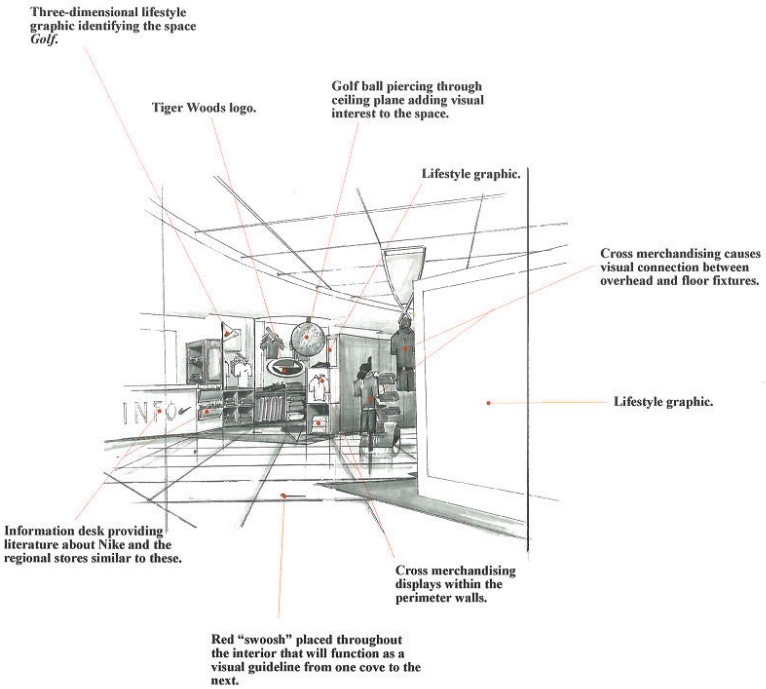


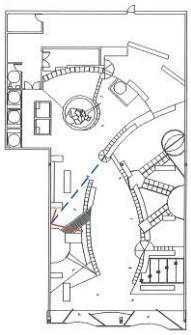


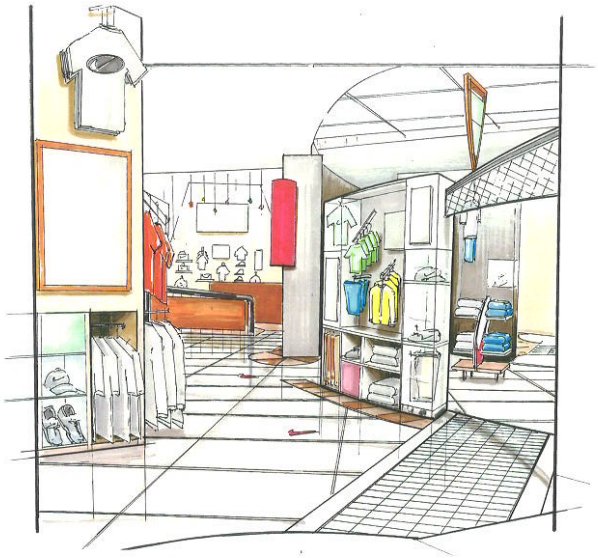


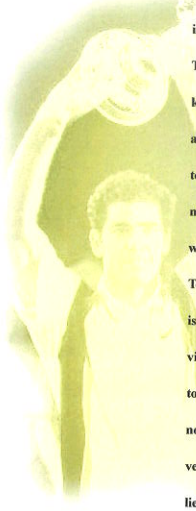


The first perspective is of the "Nike Golf" area when entering the store on the right side. Because there is no interactive kiosk in this area, other three dimensional oblects are used within the space to draw people to it as opposed to a red panel. What draws the shopper into "Nike Golf" is the golf ball suspended from the ceiling. Also, the Tiger Woods logo placed on the wall and the yellow flagpole add to the identity of the cove. The information counter to the left of "Nike Golf" will provide pamphlets and other literature that talk of the corporation. Merchandise is strategically placed throughout the area as an obstacle between the standing view point and the targeted destination point.

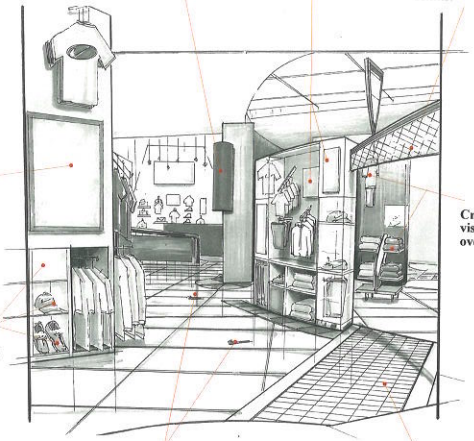


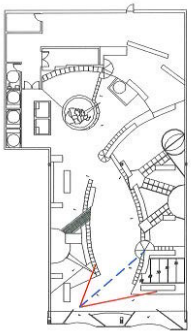


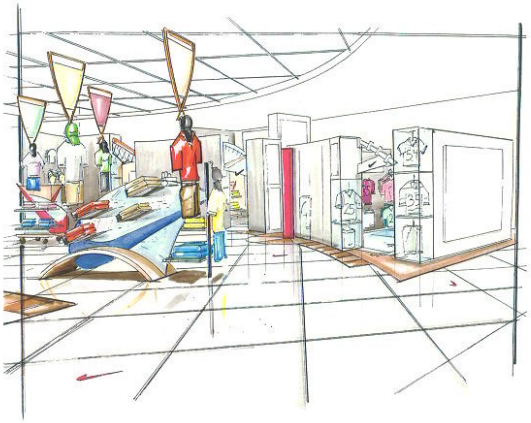




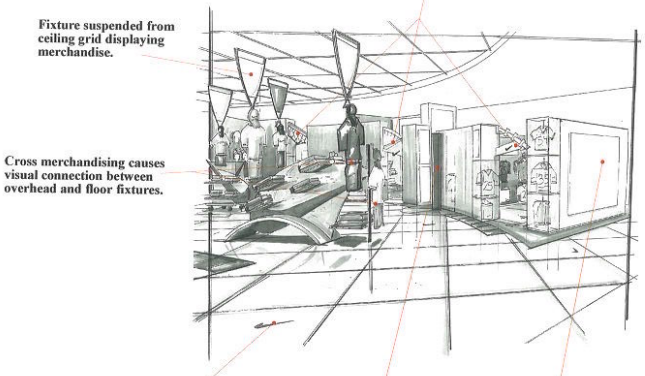
After the customer is ready to exit "Nike Golf", the visual point of interest shifts to another spot in the store. The red panel of one of the information kiosks is used to guide the shopper to another part of the space. Again, in order to get to that red panel, the consumer must walk by the highly merchandised walls. These walls are apart of "Nike Tennis". The glass tennis net on the floor is as a secondary element that will visually connect "Nike Tennis" directly to "Nike Baseball." The customer must now make the decision between venturing on to the red panel to see what lies in the rear of the store, or follow the tennis trail directly into "Nike Baseball."

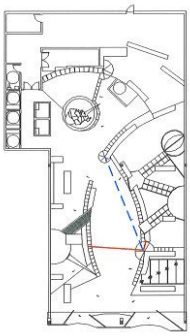






When entering the store from the left, the first visual piece of interest is the large panel attached to one of the interactive kiosks. The merchandise that is both on the fixtures and suspended from the ceiling is in front of this panel. The same strategy applies. In order to see the panel the customer must walk through all of the heavily merchandised fixtures. Secondary elements are used to entice the shopper into the cove areas. Shown here are football, baseball, and basketball. Each area is identified by a three dimensional element that describes the individual cove without word age. For example, the three dimensional element for "Nike Football" is a large string of an actual football connecting to walls together, etc.





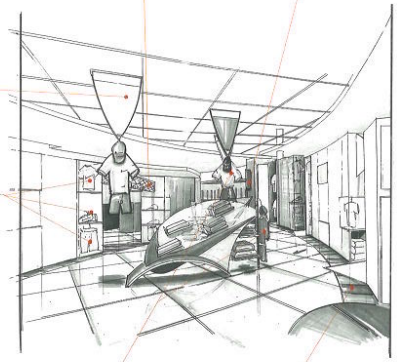
After reaching the first red panel, the customer immediately identifies the second, which is directly in front of him. As the customer follows the curve of the wall, an occasional piece of merchandise will catch the attention of their browsing eyes. As the rendering shows, certain sections of the walls are actually offset from the rest to display merchandise. In addition to the walls, the fixtures placed throughout the space will guide the consumer through the pathway as well as merchandise the desired product of the store's choice.

Three-dimensional lifestyle graphic identifying the space *Tennis*.

Visual point leading people throught the space.

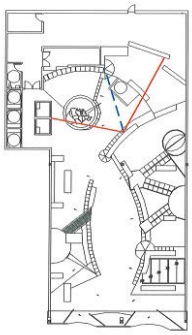
Fixture suspended from ceiling grid displaying merchandise.

Cross merchandising displays within the perimeter walls.

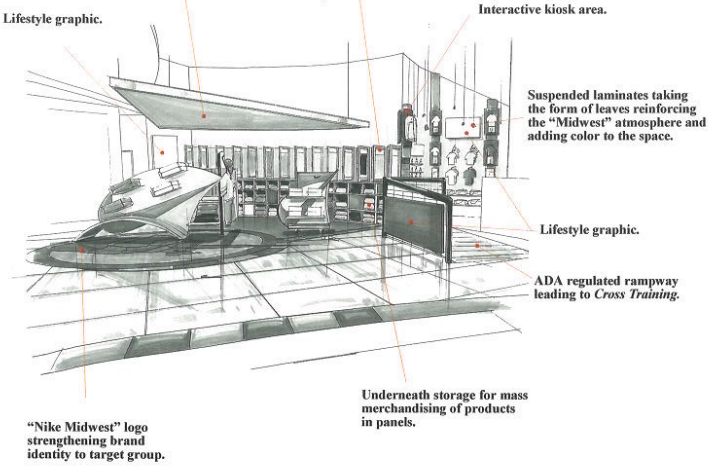


Cross merchandising causes visual connection between overhead and floor fixtures.

Tile track on the perimeter of the walkway keeps a steady visual path through the space as well as creating an intermediate barrier between the main walkway and the individual coves.



No matter which entrance customers walk through they will end up at this point, the rear of the store featuring "Team Sports" and "Cross Training". The final red panel is located directly between these two areas. After the consumer is drawn to this piece, he has the choice of which area to travel into for the desired good. By merchandising the "Team Sports" area with hinged panels, an increase in product accessability in the smallest amount of space possible is achieved. A drop ceiling adds intimacy to the area. The interactive kiosks in the rear are located in the "Cross Training" section. Suspended from the ceiling around the kiosks are colored pieces of plastic that represent autumn leaves in an abstract form. The entire store will leave a lasting impression on the customers that journey through it and will assure a return engagement.



INDUSTRY INSIGHT BLOGS

FOR YOUR CONSIDERATION TO BE OCCASSIONAL GUEST SEMESTER FACULTY

THESE BLOGS ARE TARGETED TO HARVARD AND STANFORD FOR A POSITION EVERY THREE YEARS

THE COMPLEXITIES OF A DA VINCI MIND :::::: THE THOUGHT PROCESS OF ARCHITECTURE APPLIED TO ENGINEERING:

When discussing the way my mind works, we must first discuss the way an architect thinks: generating multiple thoughts based off of one action. The brain, in my opinion, works like an intel processor. We, as humans, go throughout the day responding to different stimuli in various ways. If a person is walking down the street, and a child approaches them that is lost, the one action of recognizing the panicked look on the child's face might generate two thoughts in most people: 1, where is your mother, or 2, where is your father? For a very powerful architect, it is possible, due to the brain exercises we do, or have done, since university, 5 to 7 thoughts could be generated... just due to our training.

A complex design architect, such as myself, is trained to generate multiple thoughts based off of one action, in this case: composition vs volume. In a composition, on an X-Y plane, if a line is drawn between two vertices, most people that design that line, or just draw that line, only see a line on a plane or paper. To a powerful design architect, the "one" action of a line, will generate the following thoughts because that line will be apart of a floor plan. So, before the powerful design architects pen has completed the one action of connecting two vertices in a line, they are already thinking about the following: color, elevation, door, window, shadow, perspective, texture, trapezoid, adjacency. This is all based of the one action of drawing one line. So, from a brain exercise standpoint, one physical action is immediately generating 7 to 8 thought processes operating at the same time.

This type of thought process can be applied to other fields. Unfortunately, the life of an architect is that of a starving artist, the major money is in engineering. Engineers tend to problem solve on a linear path, writing code in steps and building blocks to solve problems. This was why writing The Smart Skinner Software was as easy for me to do as it was. The complexity of problem solving a rigging pipeline was tackled by the mind of an architect multi processing several solutions at once and converging them into one formula. Engineering Chief Visual Officer is the path I am headed, like Doug Chiang, John Knoll, Hideo Kojima, Mark Pincus, etc... and that is the path of a multi millionaire/ billionaire, most likely on the west coast of the United States; and as a world famous video game developer and tech entrepreneur.

About Gensler

Overview

Gensler is a global architecture, design, and planning firm with 49 locations across Asia, Europe, Australia, the Middle East, and the Americas. Founded in 1965, the firm serves more than 3,500 active clients in virtually every industry. Gensler designers strive to make the places people live, work, and play more inspiring, more resilient, and more impactful.

www.gensler.com

Recent Accolades

- *Architectural Record* 2020 Top 300, #1 Architecture Firm
- *Interior Design* 2021 Top 100 Giants, #1 Overall Firm
- *Building Design + Construction* 2020 Giants 400, #1 Architecture Firm
- *Building Design + Construction* 2020 World Architecture 100, #1 Overall Firm
- *ENR* 2020 Top 500 Design Firms, #1 Architecture Firm
- *ENR* 2020 Top 100 Green Buildings Design, #1 Architecture Firm
- *Glassdoor* "Best Places to Work 2020"
- *Forbes* "America's Best Employers for Diversity" in 2020

Revenues

Gensler's worldwide revenue for fiscal year 2020 was $1.55 billion.

THE FUTURE ... 1.6 BILLION? ...

THINKING POSITIVELY ABOUT THE FUTURE...

1. I write animation tools and technology for video games and films.
2. My tools are based on Star Wars.
3. The tools I write are so similar to ILM's tools for Star Wars, where I worked, that supervisors who wrote the tools on the Star Wars prequels were wanting royalties.
4. My tools have been on the cover of world wide magazines.
5. I was in R and D meetings at ILM on writing tools for production.
6. I was on the best practices review committee at ILM as one of about ten to twelve members setting digital standards for Lucas Digital globally with the former CTO of Peter Jackson's Weta Digital.
7. 250 universities on 6 continents received a freemium version of my tools at a requested pace that out paced Mark Zuckerberg's Facebook LLC (6 months).
8. One of the most respected people in the computer graphics industry, the siggraph chair, referred to me and my tools publicly on twitter as "mind blowing."
9. When the Intercon Conference reviewed my resume and work (tools), and they are sponsored by Facebook and Amazon, they awarded me the title of "One of the top 100 people in technology worldwide."
10. The technology/tools in Star Wars are just as big as technology/tools on The Lord of The Rings. This technology takes Autodesk Maya assets and optimizes them to work in real time engines like Unity and Unreal.
11. The Lord of The Rings is directed by Peter Jackson.
12. Peter Jackson owns Weta Digital.
13. Peter Jackson sold the tools division of Weta Digital where he takes Autodesk Maya assets and exports into a real time engine like Unity or Unreal to Unity LLC for 1.6 billion dollars.
14. My tools do the same thing that Peter's do.... except they are Star Wars based.

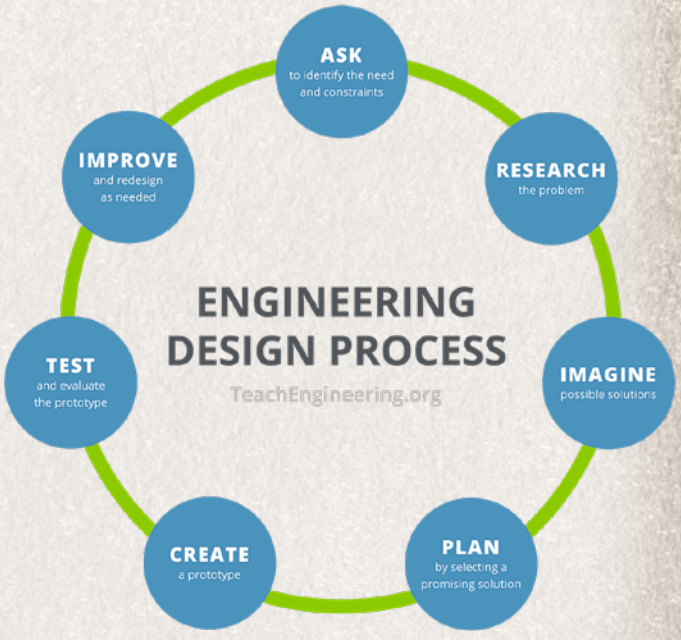
The future is bright. Sincerely "Peter 'Air' Zuckerberg"

ARE YOU AN ARTIST, OR A DESIGN ENGINEER?

THE DIFFERENCES ...

PEOPLE OFTEN ASK THE QUESTION WHEN WORKING, ARE YOU MAKING AN ART PIECE, OR A DESIGN ENGINEERING PIECE. ARE YOU AN ARTIST, OR A DESIGNER. TO CLARIFY AND SUM UP... ARTISTS FEEL, DESIGN ENGINEERS SOLVE. AN ARTIST WILL PUT THEIR INNER SOUL, SPIRIT, AND SUBJECTIVITY, INTO A PIECE OF WORK; PUTTING THEMSELVES ON A CANVAS, A FILM, A GAME, OR A PIECE OF MUSIC OUT FOR THE PUBLIC TO INTERPRET, WITH THE HOPE THAT IT GENERATES REVENUE. A DESIGN ENGINEER, LIKE MYSELF, ANALYZES A SITUATION, AND THROUGH A SYSTEMATIC PROCESS, DEVELOPS A SERIES OF SCHEMATICS THAT ARE ULTIMATELY NARROWED DOWN TO SOLVE A PROBLEM. THERE IS NOTHING WRONG WITH EITHER PROFESSION, BUT THEY LOOK AT CREATIVITY DIFFERENTLY. THE ARTIST MIGHT MAKE PIECES THAT WOULD BE IN A MUSEUM, WHEREAS THE DESIGN ENGINEER WOULD FOCUS ON THE CONCEPTUALIZATION OF THE MUSEUM ITSELF TO SHOW OFF THOSE PIECES SO THEY MIGHT SELL. ILM IS MORE CENTRIC AROUND DESIGN ENGINEERING. THE CONCEPTS BEING GENERATED FOR GEORGE LUCAS AND SUCH FILM ARE TYPICALLY MORE DESIGN ILLUSTRATIONS IN A MULTIPLE LAYOUT FORM. MOST GAME STUDIOS TAKE THIS APPROACH ALSO. IN THE DRAWINGS THEMSELVES, THEY ARE SOLVING A PROBLEM FOR THAT PARTICULAR SHOT THAT MUST BE UNDERSTOOD BY THE AUDIENCE MEMBER IN APPROXIMATELY THREE SECONDS OF SCREEN TIME. THIS HAS A DIRECT INFLUENCE IN THE PROCESS OF CONCEPTUALIZATION. AN ARTIST TAKES THE APPROACH OF "THIS IS HOW I FEEL ABOUT A PARTICULAR PIECE EMOTIONALLY," WHEREAS THE DESIGN ENGINEER WILL SAY, "THIS IS HOW I WANT YOU, THE USER, TO FEEL ABOUT THIS PIECE, NON PERSONAL REFLECTION, AND I WILL USE METHODOLOGY BASED ON RESEARCH AND SCIENCE TO GENERATE THAT RESPONSE FROM YOU, MY USER."

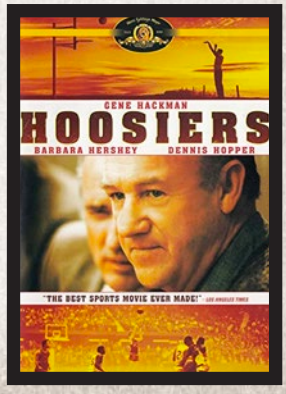
PERSONALLY, THE TYPE OF DESIGN ENGINEERING THAT I DO, IN ADDITION TO VIDEO GAME CONCEPTUALIZATION THAT I SELL ON MY T SHIRTS, IS PROGRAMMING COMPUTER GRAPHICS TOOL SOFTWARE ARCHITECTURE TO AUTOMATE THE CHARACTER TECHNICAL DIRECTION RIGGING PROCESS ON VARIOUS XBOX, PLAYSTATION, LUCASFILM, ELECTRONIC ARTS, ETC. TITLES. IN THE SCHEMATIC PHASE OF THIS TYPE OF DESIGN, WORKFLOW, PROCESS, ANIMATION POSE ABILITY, AND PIPELINE EASE INTO A VIDEO GAME ENGINE ARE WHAT IS TYPICALLY DRAFTED UP.



THE LOVE OF DESIGN AND ANIMATION ENGINEERING: CREATING IN YOUR MOST ELEMENTARY FORM

THOUGHTS ON INNOVATION, LAYOFFS, AND MENTAL BLOCK

The animation and design engineering industry can be challenging to be in due to the amount of layoffs in the profession. The money can be good, I pulled about just over 170k three years out of school at Lucasfilm, and I've gotten job specs for over 400k before for entertainment software manager/ software architect in the Bay Area. In fact, if you look online on YouTube, it is common that mid level engineers at google often pull 500k between salary, stock, and bonus. That being said, it can be relatively unstable to be in due to studio acquisitions and closures. If you ever experience the gloom of a layoff, which will happen to everyone at least once during their career most likely, remember your passions towards your industry and the fun you have creating. What I do to get focused, is watch the first four minutes, intro, to the movie "Hoosiers". In that scene, not only is the music incredible, it shows a younger generation of people, not glitzed and glammed, not with fancy cars, not with skyscrapers and penthouses, doing what they love to do... play basketball in small towns in Indiana. These are not boys playing for NIL, or for a future NBA contract where they will get women and alcohol. They are just playing because they love the game. The essence of what it means to have the mindset of a performer... or a swoosh. That mindset applies to me as well when thinking about the future of running a major video game organization. Often at times I think to myself how great it would be to travel to Europe, I've never been, and go to a cafe near Bilbao where Frank Gehry's museum is located (similar to the cafe at the end in the first Mission Impossible where Tom Cruise and Ving Rhames enjoy each other's company after a hard days work), sit in a cobblestone brook, get an espresso drink, pull out my iPad, put on a Rolling Stones classic like "She's a Rainbow", take out my Apple Pencil.... and just design something. It can be a new character, a piece of architecture in a game, code, a new rigging system, etc. But just drift away to the land of John Knoll and Jony Ive, listen to Mick, and let it flow. In creating, remember, as long as a piece of paper, a pen, and a cup of coffee, make you happy, you will have nothing to ever fear. Don't forget to simplify and create in your most elementary form. Things work themselves out. Just stay focused and never lose your imagination.



VIDEO GAME DESIGN EXPANSIVE TECHNOLOGY

THE KEY FIGURE IN THE FUTURE IS THE TOOLS DESIGNER

AS GAMES EXPAND THROUGH CONSOLE ITERATIONS AND EVOLVE FROM FOUR HOURS OF GAMEPLAY, TO EVENTUALLY FORTY HOURS OF GAMEPLAY, WHAT MUST BE ANALYZED IN THE CREATION PROCESS IS THE AMOUNT OF BILLABLE HOURS SPENT ON THE FORMATION OF ASSETS. VIDEO GAMES, AS THEY EXPAND INTO MORE COMPREHENSIVE STORY, GAMEPLAY, AND LEVEL OF DETAIL, ARE INCREASING IN QUALITY AT APPROXIMATELY 800 PERCENT PER GENERATION JUMP… ABOUT EVERY SEVEN YEARS. THE PROBLEM IS, THE BUDGETS FOR THE GAMES DO NOT ALLOT FOR EIGHT TIMES THE STAFF REQUIRED TO BUILD THEM, EVEN THOUGH CONSOLE GAMES INCREASE IN PRICE APPROXIMATELY TEN DOLLARS PER GAME PER ITERATION (PLAYSTATION 3 GAMES COSTING $50, PLAYSTATION 4 GAMES COSTING $60, AND PLAYSTATION 5 GAMES COSTING $70). THIS IS WHERE AUTOMATION AND ARTIFICIAL INTELLIGENCE NEED TO COME INTO PLAY TO MAKE UP FOR THE MISSING PRODUCTION STAFF THAT CAN'T BE MADE UP FOR BY THE $10 JUMP IN PRICE ALONE.

WITH THAT BEING SAID, THE MOST COVETED PERSON, WHO SHOULD IN THEORY BE THE WEALTHIEST, WILL BE THE TOOLS DESIGNER WHO CREATES THE TECHNOLOGY WHICH AUTOMATES EXTENDED PLAYABLE LEVELS TO EXPLORE AS WELL AS THE ANIMATION PIPELINE. FOR THE SMART SKINNER SOFTWARE/ TECHNOLOGY THAT I DESIGNED, I WAS ABLE TO SHED THE CHARACTER TECHNICAL CONSTRUCTION PROCESS AT THE LEVEL OF INDUSTRIAL LIGHT AND MAGIC FROM APPROXIMATELY 80 HOURS TO ABOUT 15 MINUTES. THIS SAME IDEOLOGY CAN BE APPLIED TO CHARACTER DESIGN, MOTION SYSTEMS, ENVIRONMENTS, AND PROPS, SAVING COSTS WHILE NOT COMPROMISING ON QUALITY. I ACHIEVED THE SYSTEM BY INVENTING A REFERENCE SKINNING PIPELINE THAT HAD NOT BEEN DONE BEFORE WHILE CONVERGING A CONTROL RIG FROM ALL PREVIOUS EMPLOYERS, AND INCORPORATING MOTION CAPTURE. AFTER A FEW TESTS AND WORKING OUT A FEW BUGS, IT WORKED BEAUTIFULLY.

SO, TO IMAGINE WHAT THAT MEANS, FOR THE TOOL DESIGNER IF HE OR SHE WERE TO GO INDEPENDENT, THE AUTOMATION TECHNOLOGY THAT WOULD BE REQUIRED TO CUT COSTS ON THE PRODUCTION OF SAY FOUR CHARACTERS, AT 80 HOURS EACH, OR 320 HOURS, COULD BE DELIVERED IN 1 HOUR. IF THE TOOL DESIGNER IS BILLING AT $100 PER HOUR, AT 320 HOURS, THAT'S $32,000 OF BILLABLE TIME DELIVERED IN 1 HOUR, OR $100. FROM A BUSINESS STRATEGY STANDPOINT THEN, THE TOOL DESIGNER, PROVIDED THE CLIENT LIKED THE TECHNOLOGY, COULD CHARGE $10,000 FOR THE ONE HOUR OF WORK, DELIVER THE CHARACTERS IN ONE HOUR, AND SAVE THE PRODUCTION $22,000 IN COSTS… THEREBY BEING THE KEY ASSET IN THE PIPELINE. AT THAT RATE, THE TOOL DESIGNER, IF HE OR SHE ONLY WORKED ONE HOUR A MONTH, COULD EARN $120,000 PER YEAR FOR A TOTAL ANNUAL WORK TIME OF 12 HOURS. THAT RATE WOULD THEN BE MULTIPLIED TO SCALE. THAT'S A PRETTY AMAZING BUSINESS STRATEGY.

THE SAME THING WOULD GO FOR A.I. AS YOU EXPAND INTO LEVEL DESIGN OF ENVIRONMENTS. THROUGH PROCEDURAL GENERATION CREATED BY SOFTWARE THAT THE TOOL DESIGNER AUTHORS, BUILDINGS AND ENVIRONMENTAL DIGITAL ARTIFACTS CAN BE PROCEDURALLY DESIGNED THROUGH THE USE OF A MODIFIABLE TEMPLATE THAT SHOULD, IN THEORY, POPULATE A DIGITAL CANVAS INSTANTLY WITH VERY LITTLE MAN HOURS, SAVING MONTHS OF TIME ON THE PRODUCTION PHASE. THIS IS WHY AS GAMES BECOME MORE COMPLEX, THE MOST COVETED PERSON WILL BE THE TOOLS DEVELOPER… OR THE "AUTOMATOR" OR "PROCEDURAL GENERATOR."

DESIGNING ARCHITECTURAL FORMS AND ENVIRONMENTS FOR DIGITAL, NOT PHYSICAL

A PROCESS OF DIGITAL CLAY SCULPTING VS PHYSICAL CHIP BOARD MOUNTING

As I have let it be known, one of my goals is that every three years I take a sabbatical from game entrepreneurship and development and lecture as a professor in the digital design department at Harvard or Stanford. If that honor gets bestowed on me, the class will be centered on the workflow used to conceptualize, design, and execute the proper principles required to build a level, or buildings and objects in that level, for a video game like Grand Theft Auto. Architects often use a process in design where they design a building from the "inside out." Meaning, they explore the various functions of that building and practice various methodologies to make a functional space that influences the exterior of the design, but with the interior functionality taking dominance. In video gaming, however, a lot of environmental objects, building included, are created simply for the purposes of ornamentation. As opposed to wayfinding adjacency plans and elevations, three dimensional forms are immediately drafted. In architecture, when conceptualizing, it is often the process goes from pen and paper, to chip board model, to rendering... composition, to physical exploration.

Due to the freedoms a designer can have in the 3D world, such as no gravity, etc, the level designer can begin the conceptualization process with a different set of tools... like Zbrush and autodesk mudbox. The difference, when most architects explore in the third dimension, they do it through chip board modeling. The problem with chip board modeling, when you explore the overall form, you are focused on cutting an individual piece of foam core or chip board and assembling an overall form by assembling parts, like legos, to create a physical volume. The focus when doing this, the problem, is you are focusing on individual Lego pieces of foam core that you are gluing together as opposed to the roughed volume itself. In mudbox and Zbrush, the designer can use the digital tools to grab digital balls of clay, and rough out in raw form a volume relatively quickly, without worrying about structural architecture. These forms, once generated, can then be brought into autodesk maya where digital planes and cubes can be applied as paneling to the blocked out form. This process, should in theory lead to a smoother workflow for the design architect making the game.

Lastly, once this workflow is completed for these games, the digital paneling, which is defined in the viewport of the software, can now be identified mathematically. If the vertices, volumes, shaders, and forms, are then identified mathematically, they can be regenerated instantly in code... multiple copies with each building having a variance but still retaining the same architectural style. So, if a front view of a building, that we will call "The Brent", has a set of parameters that were defined in the structures concept stage in mudbox, that in order to be a "Brent", the opening on the building has to be centered in the middle of an exterior wall, and that is the only "coded" rule, then as long as the front wall's opening, for example, has ten feet on either side, if that building were to be procedurally generated to save time in the creation portion of Grand Theft Auto, if the "Brent" command was called in object oriented programming, and three buildings were generated, they could have three unique openings entrances to each; as long as they satisfied the rule of frontal wall being equal on both sides. Those initial designs would be drafted in that Zbrush or mudbox software and called out procedurally. Therefore, from a monetization standpoint, it is then possible that in a Grand Theft Auto type game, as opposed to spending multiple months designing buildings and objects, if that game were to take place in a city like Columbus, Ohio, for example, each object in the object oriented programming procedure with randomization on building details, could look like the same architect designed various buildings in the same city, or multiple architects designing multiple buildings in the same city, that would be instantly generated through code; with groups of buildings sharing similar architectural style but no two buildings being the same- therefore looking like they were designed by the same architect of a particular period- all instantly. This technology, through default then, would save a project like Grand Theft Auto tens of millions in production costs while maintaining quality. This kind of methodology and workflow I am also interested in pursuing as a second masters in engineering from what will be the potential of a top five engineering school like Stanford, Berkeley, MIT, Carnegie Mellon, or Illinois.

A DESIGN ENGINEERING CHALLENGE

CULTURAL DESIGN DIFFERENTIATIONS EXECUTED IN MULTIPLE VARIANTS OF HARRY POTTER'S HOGSMEADE

As I have made public, my eventual goal at an entertainment giant like Industrial Light and Magic, EA, Sony PlayStation, XBOX, Rockstar, or Warner Bros, is to become a Chief Visual Officer, by which, through salary, stock, and bonus, could pay upwards of ten million a year. One of the first tasks I've mentioned where I could prove my skill set for that title is on the film game convergence portion of Spider-Man intellectual property where I write a common pipeline to be used in the character rigging portion of the hero characters between PlayStation, Sony Pictures Imageworks, and Sony Pictures Animation. That pipeline and workflow would save Sony millions in cost, afford downsizing of unnecessary teams, and not sacrifice quality of motion or deformation across the three platforms, while maintaining the "Spider" aesthetic. This task most likely, at early estimate, with one or two engineers at my disposal, would take six months to a year to pull off: the spider converged autoskinning modular autorig.

The second challenge I would like to tackle is the one that this blog is centered on. As the Wizarding World of Harry Potter expands in games and films, more exploratory content will need to be produced. By the films alone, the majority of the scenery has taken place in England. As DLCs for expansive video games get developed, it is possible that more "Hogwarts" style schools will pop up in different cities throughout the planet in this world: a school for the students to attend, and a shopping area (Hogsmeade) for them to purchase supplies in retail. What would be the challenge, would be to first identify where all of the different school locations would be (Rome, Moscow, Chicago, Paris, Tokyo, Prague, etc), identify what the key features of the architecture of that time period are per city (maybe in 1900 in Tokyo a lot of Bamboo was used on the roofs of first level buildings as opposed to brick in Prague), and then design plugin technology based on object oriented programming where you take a base design of a Harry Potter building in Hogsmeade, that JK Rowling would approve of, of course, select the object, execute the operation, and through procedural design the building would change to that city's period architectural style. The workflow would then be, spending twenty hours on a base polygonal building, then through this technology, instantly procedurally designing a new building based on that style cutting your design production in at least half per building.

So, if there were a Hogsmeade in five cities, and a stylized building took 40 hours to create the long way, and a base building prior to the technology took twenty hours, and each Hogsmeade had thirty buildings in it, as opposed to the art team having to spend (5 cities X 40 hours per building X 30 buildings) or 6000 hours, they could use this technology for (1 city X 20 hours per building X 30 buildings) 600 hours, then run the technology through the instant design... and 6000 hours of environment art design would be completed in 600 hours.

This base tech could then be applied to other games outside of Warner Bros, including if there was a multiverse Spider game for PlayStation or multiple planets in Halo. Like I had mentioned in a previous blog, as games expand and the cost to produce the mass levels of these games does not get added into value of the budget in regards to additional staff, the tools designer or chief visual officer, that can write the technology to procedurally generate the large amount of quantity of objects needed to complete the level will become the most important person in the pipeline.

THE PR TEAM OF MICHAEL JACKSON

BEING CONTACTED ABOUT REPRESENTATION

AS I WRITE THIS... I'M LISTENING TO "SMOOTH CRIMINAL." ONE OF THE BIGGEST ACCOMPLISHMENTS THAT AN ARTISTIC PERSON CAN HAVE, IS BEING RECOGNIZED AS AN INDIVIDUAL OUT OF THE GROUP, LIKE MICHAEL FROM THE JACKSON 5, WHERE MEDIA AND ARTISTIC ORGANIZATIONS RECOGNIZE YOUR INDIVIDUAL ACHIEVEMENTS, WANT TO REPRESENT YOU, AND MARKET YOUR INDIVIDUAL ACHIEVEMENTS WORLDWIDE. THAT HAS HAPPENED, CREATIVELY... I'VE MADE IT. I WAS REALLY PLEASED WHEN THE PR PERSON OF MICHAEL JACKSON REACHED OUT TO ME ABOUT REPRESENTING ME. DUE TO PUTTING MY PARENTS ASSETS IN CASH LIQUID, PROBATES, AND GETTING THEIR HOUSE PREPPED TO SELL, I PUSHED BACK SIGNING WITH HIM, TEMPORARILY... EVEN THOUGH I HAVE TWO MONETIZED WEBSITES AND SOFTWARE PLUGINS I AM RERELEASING TO MARKET. I WILL BE SIGNING WITH HIM ONCE THE PROBATE SITUATION IS HANDLED.

I AM... THE ARCHITECT... THE INDUSTRIAL DESIGNER... THE ENGINEER... THE ARTIST... THE ENTREPRENEUR... THE INNOVATOR... THE JACKSON. MICHAEL IS ONE OF THE GREATEST MUSICIANS OF ALL TIME, AND I AM ONE OF THE HIGHEST ACCOLADED CREATIVE DESIGN ENGINEERS/ GRAPHICS ARCHITECTS ON THE PLANET. ALTHOUGH I THOUGHT IT WOULD EVEN BE A MATTER OF TIME UNTIL THIS HAPPENED TO ME, IT IS AN HONOR THAT THIS HAS HAPPENED. JUST BRILLIANT.

THE LUCASFILM BEST PRACTICES REVIEW COMMITTEE

TECHNIQUES, NOT CONTENT

VISUALLY, ARTISTICALLY, ENGINEERING WISE, AND TECHNICALLY, LUCASFILM IS THE MOST ADVANCED COMPANY IN THE HISTORY OF THE PLANET. I HAVE EVEN MET ENGINEERS AT THE DEPARTMENT OF DEFENSE THAT TECHNICALLY DO NOT STACK UP TO THE SKILL SET REQUIRED TO PERFORM AT INDUSTRIAL LIGHT & MAGIC. TO BE ON THE LUCASFILM BEST PRACTICES STEERING COMMITTEE WAS A REAL HONOR. TECHNICALLY AND ARTISTICALLY, THAT PUTS ME IN THE SAME CATEGORY AS LEONARDO DAVINCI. THIS GROUP THAT MET EVERY THREE WEEKS WAS NOT DEALING WITH THE CONTENT OF STAR WARS. WE WERE DEALING WITH THE TECHNICAL CONSTRUCTION, BEST PRACTICES, AND METHODOLOGIES USED TO DESIGN THE "NUTS AND BOLTS" OF THE ASSETS IN STAR WARS. IT WAS THE ASSEMBLY BETWEEN THE TEN TO TWELVE OF US, ALL LEADERS WITHIN THE ORGANIZATION, THAT WE COULD SET STANDARDS THAT WOULD BE ROLLED OUT FIRM WIDE. THE MAIN ASSEMBLER OF THE GROUP WAS THE FORMER CTO, RIGHT HAND PERSON, OF PETER JACKSON'S WETA DIGITAL WHO GUIDED THE GROUP. I WAS VERY VOCAL IN MY OPINIONS ON METHODOLOGIES, ESPECIALLY WHEN IT CAME TO DEFORMATION PRACTICES ON CHARACTER TECHNICAL CONSTRUCTION. THE GROUP WENT OVER EVERYTHING FROM SHADERS, TO RIGGING, BUT FOCUSED PRIMARILY ON MODELING TOPOLOGY. A VERY GREAT EXPERIENCE AND TEAM TO BE ON WHILE I WAS AT LUCASFILM. IF I DO EVENTUALLY BRANCH OUT ON MY OWN TO FORM A GAME OR ANIMATION STUDIO, OR IF I LEAD THE TECHNICAL AND VISUALS OF ANOTHER COMPANY, THE CONVERSATIONS THAT WERE HELD IN THESE MEETINGS WILL GIVE ME A CONFIDENCE WHERE I KNOW I AM MAKING THE RIGHT DECISIONS. MAY THE FORCE BE WITH YOU.

BECOMING A WELL ROUNDED CHIEF VISUAL OFFICER

TAKING INSPIRATION FROM FASHION AND LAUNCHING THE CLOTHING LINE

When working in games, or even visual effects concepts, different creative approaches are used when problem solving. No one approach is better than another. One might be industrial design, where you go through a scientific methodology to create a character or spaceship. One might be architectural, where you explore the z axis (depth) of a virtual environment in order to navigate through... and fundamentals such as line, opening, barrier, etc come into play. One could be artistic, where the design engineer/ chief visual officer looks at volume in a digital sculpture or composition, as well as the color, shade, and blending variants on a canvas, character, or background plate. Finally, one can be fashion oriented, where the visual officer looks at volumes, colors, material specification, although in games digital, on a character or creature in a game. In order to be well rounded as a chief visual officer, it is good to study all processes, that way when you conceptualize, or delegate to your team, you are equipped to handle multiple design problems with different approaches should they arise. When I was an intern on Superman, I was designing the game's citizen outfits on the title. In order to do so, I had to read magazines varying from GQ, to Vogue, to Cosmopolitan, look at the trends of the time, and incorporate them into the player models. It helped that in undergrad at OSU I had worked as a visual merchandiser at Tommy Hilfiger. I understood fashion, trends, what to look for in working class citizens that would be walking the streets in Metropolis. This made it easier when completing this task because I could design "trendy" attire.

For my own clothing line, Sketches of Brent Zorich, because I have a love of fashion, I contacted a distributer and got the Adobe Photoshop sketches I had lying around to become designs on t-shirts ready to sell. Within a couple of months, due to the popular comments made to my drawings online, PR firms began contacting me putting me in The Wall Street Journal as well as giving me the opportunity to potentially be in Vogue. I have always been a fan of the movie "The Devil Wears Prada" and learned from a famous quote by Warren Buffett, "the key to achieving financial wealth is to put yourself in a position to earn money while you are asleep". Taking baby steps, I now have two monetized websites that sell two fashion product lines, t-shirts and hoodies, and I earn about ten dollars per every shirt or hoodie sold. It might not sound like much, but it can add up, it's a break from crunching Autodesk Maya constantly, and it's applicable as a skill set that would impress a Kathy Kennedy (Lucasfilm President), Tokyo (Sony Heads), Satya Nadella (Microsoft), or Andrew Wilson (Electronic Arts CEO) that would assist in eventually becoming a chief visual officer at an Electronic Arts, Sony, ILM, etc, that with salary, stock, and bonus, could bring in three to ten million a year eventually. Job well done.

TWO MONETIZED WEBSITES SELLING CLOTHING:

1. http://sketchesofbrentzorich.com
2. https://brentzorich.com/index.html#refClothing

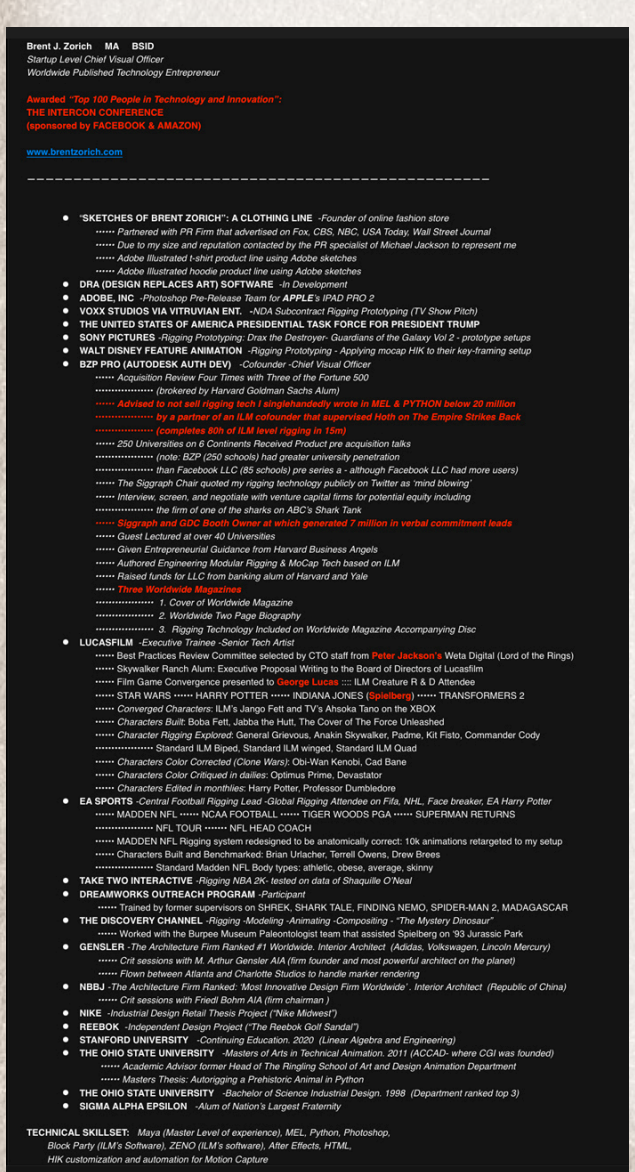
THE POTENTIAL SECOND MASTERS DEGREE AT STANFORD:

TO MBA OR TO MS (TO MANAGE OR TO BUILD)

ME BEING VERY GRATEFUL, I AM CURRENTLY BEING PURSUED BY STANFORD UNIVERSITY FOR A SECOND MASTERS, THIS ONE BEING A MBA. STANFORD IS THE TOP SCHOOL ON THE PLANET AND IT IS GREAT TO BE ON THEIR RADAR. THE QUESTION I HAVE IN REGARDS TO THIS, IS A MBA NECESSARY WHEN YOU HAVE ALREADY OPERATED YOUR OWN BUSINESS AND NEARLY SOLD IT FIVE TIMES. I'M NOT SURE OF THE BENEFITS TO A MBA, OR WHAT YOU WOULD LEARN IN CLASS, THAT YOU AREN'T LEARNING ON THE JOB. IT TYPICALLY SEEMS THAT A MBA IS FOR PROSPECTIVE STUDENTS WHO MIGHT HAVE ONE TO TWO YEARS OF EXPERIENCE, AND WANT AN EDGE ON THEIR COMPETITION. AN EXECUTIVE MBA MIGHT BE MORE ADVANTAGEOUS AT THIS POINT. I WOULD BE FOLLOWING IN THE STEPS OF ASIAN AMERICAN BUSINESS WOMAN AND FORMER LUCASFILM PRESIDENT MICH CHAU; ALTHOUGH ASIAN AMERICAN CHIEF VISUAL OFFICER AT LUCASFILM, DOUG CHIANG, MIGHT BE MORE OF WHAT I HAVE IN MIND.

FROM A CAREER STANDPOINT, I MIGHT BE MORE INTERESTED IN CONTINUING STUDY, THE SECOND MASTERS, BEING IN ENGINEERING... OR THE MS. I'D PROBABLY RATHER BUILD ASSETS THAN MANAGE ASSETS. THOUGHTS ARE, IF YOU HAVE AN ARTISTIC TALENT, IT MIGHT BE A BETTER FIT FOR THE COMPANY YOU ARE WITH, OR INDEPENDENTLY, TO USE YOUR HANDS OVER DIRECTING ORDERS ON A PROJECT.

CAREERS ARE LONG, THINGS CAN CHANGE. BUT I THINK I'D RATHER BE WALT DISNEY THAN ROY DISNEY. THAT BEING SAID, IT WOULD BE NICE TO SHOOT A SIGNATURE IN AN EMAIL LIKE THIS IMAGE TO VENTURE CAPITALISTS IN SILICON VALLEY FROM A STANFORD DOT EDU EMAIL ADDRESS.



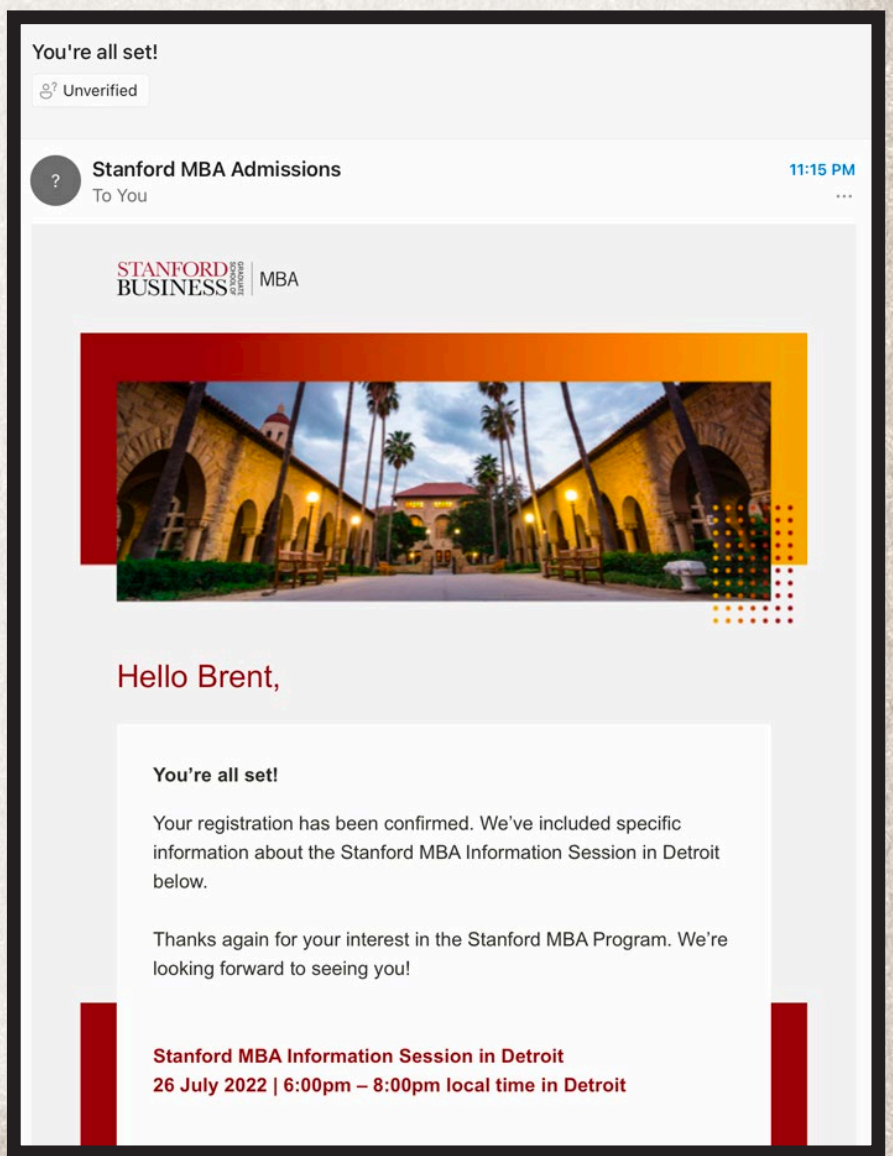
Brent J. Zorich MA BSID
Startup Level Chief Visual Officer
Worldwide Published Technology Entrepreneur

Awarded *"Top 100 People in Technology and Innovation"*:
THE INTERCON CONFERENCE
(sponsored by FACEBOOK & AMAZON)

www.brentzorich.com

- **"SKETCHES OF BRENT ZORICH": A CLOTHING LINE** *-Founder of online fashion store*
  - ····· *Partnered with PR Firm that advertised on Fox, CBS, NBC, USA Today, Wall Street Journal*
  - ····· *Due to my size and reputation contacted by the PR specialist of Michael Jackson to represent me*
  - ····· *Adobe Illustrated t-shirt product line using Adobe sketches*
  - ····· *Adobe Illustrated hoodie product line using Adobe sketches*
- **DRA (DESIGN REPLACES ART) SOFTWARE** *-In Development*
- **ADOBE, INC** *-Photoshop Pre-Release Team for* ***APPLE****'s IPAD PRO 2*
- **VOXX STUDIOS VIA VITRUVIAN ENT.** *-NDA Subcontract Rigging Prototyping (TV Show Pitch)*
- **THE UNITED STATES OF AMERICA PRESIDENTIAL TASK FORCE FOR PRESIDENT TRUMP**
- **SONY PICTURES** *-Rigging Prototyping: Drax the Destroyer- Guardians of the Galaxy Vol 2 - prototype setups*
- **WALT DISNEY FEATURE ANIMATION** *-Rigging Prototyping - Applying mocap HIK to their key-framing setup*
- **BZP PRO (AUTODESK AUTH DEV)** *-Cofounder -Chief Visual Officer*
  - ····· *Acquisition Review Four Times with Three of the Fortune 500*
  - ····· *(brokered by Harvard Goldman Sachs Alum)*
  - ····· ***Advised to not sell rigging tech I singlehandedly wrote in MEL & PYTHON below 20 million***
  - ····· ***by a partner of an ILM cofounder that supervised Hoth on The Empire Strikes Back***
  - ····· ***(completes 80h of ILM level rigging in 15m)***
  - ····· *250 Universities on 6 Continents Received Product pre acquisition talks*
  - ····· *(note: BZP (250 schools) had greater university penetration*
  - ····· *than Facebook LLC (85 schools) pre series a - although Facebook LLC had more users)*
  - ····· *The Siggraph Chair quoted my rigging technology publicly on Twitter as 'mind blowing'*
  - ····· *Interview, screen, and negotiate with venture capital firms for potential equity including*
  - ····· *the firm of one of the sharks on ABC's Shark Tank*
  - ····· ***Siggraph and GDC Booth Owner at which generated 7 million in verbal commitment leads***
  - ····· *Guest Lectured at over 40 Universities*
  - ····· *Given Entrepreneurial Guidance from Harvard Business Angels*
  - ····· *Authored Engineering Modular Rigging & MoCap Tech based on ILM*
  - ····· *Raised funds for LLC from banking alum of Harvard and Yale*
  - ····· ***Three Worldwide Magazines***
  - ····· *1. Cover of Worldwide Magazine*
  - ····· *2. Worldwide Two Page Biography*
  - ····· *3. Rigging Technology Included on Worldwide Magazine Accompanying Disc*
- **LUCASFILM** *-Executive Trainee -Senior Tech Artist*
  - ····· Best Practices Review Committee selected by CTO staff from **Peter Jackson's** Weta Digital (Lord of the Rings)
  - ····· Skywalker Ranch Alum: Executive Proposal Writing to the Board of Directors of Lucasfilm
  - ····· Film Game Convergence presented to **George Lucas** :::: ILM Creature R & D Attendee
  - ····· STAR WARS ····· HARRY POTTER ····· INDIANA JONES (**Spielberg**) ····· TRANSFORMERS 2
  - ····· *Converged Characters:* ILM's Jango Fett and TV's Ahsoka Tano on the XBOX
  - ····· *Characters Built:* Boba Fett, Jabba the Hutt, The Cover of The Force Unleashed
  - ····· *Character Rigging Explored:* General Grievous, Anakin Skywalker, Padme, Kit Fisto, Commander Cody
  - ····· Standard ILM Biped, Standard ILM winged, Standard ILM Quad
  - ····· *Characters Color Corrected (Clone Wars):* Obi-Wan Kenobi, Cad Bane
  - ····· *Characters Color Critiqued in dailies:* Optimus Prime, Devastator
  - ····· *Characters Edited in monthlies:* Harry Potter, Professor Dumbledore
- **EA SPORTS** *-Central Football Rigging Lead -Global Rigging Attendee on Fifa, NHL, Face breaker, EA Harry Potter*
  - ····· MADDEN NFL ····· NCAA FOOTBALL ····· TIGER WOODS PGA ····· SUPERMAN RETURNS
  - ····· NFL TOUR ····· NFL HEAD COACH
  - ····· MADDEN NFL Rigging system redesigned to be anatomically correct: 10k animations retargeted to my setup
  - ····· Characters Built and Benchmarked: Brian Urlacher, Terrell Owens, Drew Brees
  - ····· Standard Madden NFL Body types: athletic, obese, average, skinny
- **TAKE TWO INTERACTIVE** *-Rigging NBA 2K- tested on data of Shaquille O'Neal*
- **DREAMWORKS OUTREACH PROGRAM** *-Participant*
  - ····· Trained by former supervisors on SHREK, SHARK TALE, FINDING NEMO, SPIDER-MAN 2, MADAGASCAR
- **THE DISCOVERY CHANNEL** *-Rigging -Modeling -Animating -Compositing - "The Mystery Dinosaur"*
  - ····· Worked with the Burpee Museum Paleontologist team that assisted Spielberg on '93 Jurassic Park
- **GENSLER** *-The Architecture Firm Ranked #1 Worldwide. Interior Architect (Adidas, Volkswagen, Lincoln Mercury)*
  - ····· *Crit sessions with M. Arthur Gensler AIA (firm founder and most powerful architect on the planet)*
  - ····· *Flown between Atlanta and Charlotte Studios to handle marker rendering*
- **NBBJ** *-The Architecture Firm Ranked: 'Most Innovative Design Firm Worldwide' . Interior Architect (Republic of China)*
  - ····· *Crit sessions with Friedl Bohm AIA (firm chairman)*
- **NIKE** *-Industrial Design Retail Thesis Project ("Nike Midwest")*
- **REEBOK** *-Independent Design Project ("The Reebok Golf Sandal")*
- **STANFORD UNIVERSITY** *-Continuing Education. 2020 (Linear Algebra and Engineering)*
- **THE OHIO STATE UNIVERSITY** *-Masters of Arts in Technical Animation. 2011 (ACCAD- where CGI was founded)*
  - ····· *Academic Advisor former Head of The Ringling School of Art and Design Animation Department*
  - ····· *Masters Thesis: Autorigging a Prehistoric Animal in Python*
- **THE OHIO STATE UNIVERSITY** *-Bachelor of Science Industrial Design. 1998 (Department ranked top 3)*
- **SIGMA ALPHA EPSILON** *-Alum of Nation's Largest Fraternity*

TECHNICAL SKILLSET: *Maya (Master Level of experience), MEL, Python, Photoshop, Block Party (ILM's Software), ZENO (ILM's software), After Effects, HTML, HIK customization and automation for Motion Capture*



You're all set!

Unverified

Stanford MBA Admissions
To You
11:15 PM

STANFORD BUSINESS GRADUATE SCHOOL | MBA

Hello Brent,

You're all set!

Your registration has been confirmed. We've included specific information about the Stanford MBA Information Session in Detroit below.

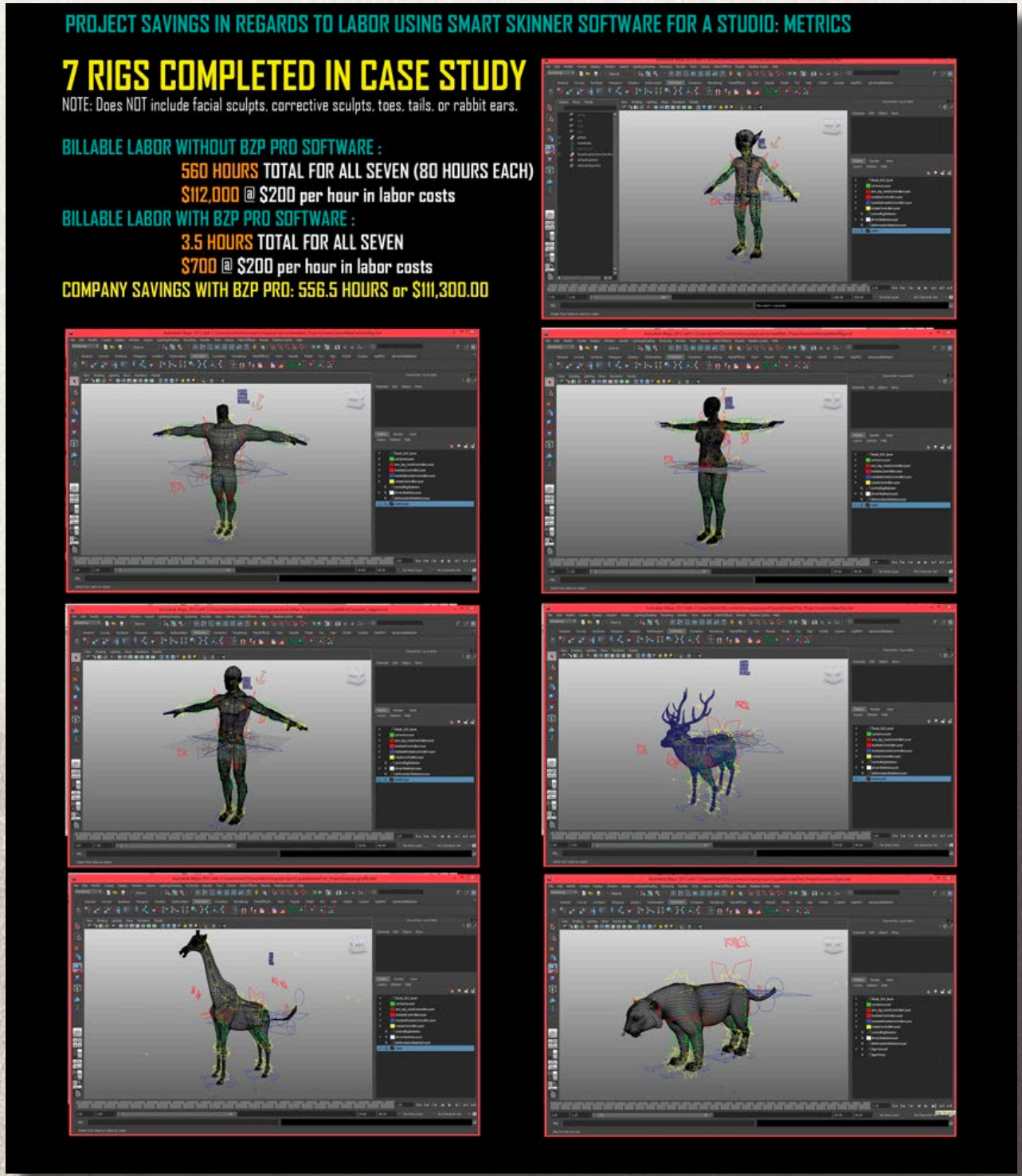
Thanks again for your interest in the Stanford MBA Program. We're looking forward to seeing you!

Stanford MBA Information Session in Detroit
26 July 2022 | 6:00pm – 8:00pm local time in Detroit

THE PLAYER

BEING OF VALUE

A PLAYER IS NOT THE PERSON WHO TALKS THE LOUDEST OR PARTIES THE HARDEST... NO... A PLAYER IS THE PERSON WHO CAN DEVELOP TECHNOLOGY THAT CAN COMPLETE 560 HOURS OF GEORGE LUCAS LEVEL WORK IN 3.5 HOURS WITHOUT A COMPROMISE ON QUALITY.



THE WORK OF TIM BURTON

I have always been a fan of Tim Burton. His dark work, very stylized, and twisted sense of humor has always spooked me out. He is a true success story of a Cal Arts classically trained animator who went to work for Walt Disney Feature Animation, got terminated from Disney Animation for being too dark, developed his own style, and executed it in a way in which no one else has been able to execute.... now working with Disney on his own terms and calling the shots on his own production. His drawings for concept are very stylized and dark, having character, even though I am more of an industrial design illustrator when it comes to artwork. I am really looking forward to watching his latest work, "Wednesday." Jenna Ortega has won several awards as being an up and coming Mexican and Puerto Rican rising star, even though she is twenty, the early reviews on her show are through the roof. Plus, when I read about the show and looked her up, her Greek Astrology is a Libra, and I'm a Sagittarius... total compatibility... and her Chinese Zodiac is a Horse, and I'm a Tiger... total compatibility. What do you know... Wednesday Addams might be my perfect working relationship, how cool is that? She's a very dark actress that takes her craft seriously. Often at times in Potter, I see myself as Lucius Malfoy, due to the love of family, his serious side when it comes to work, and his pure blood wizardry... as I feel, as though due to my ancestry I am a pure blood architect, artist, and design engineer. In addition to Wednesday, I could see Jenna playing an alternate younger adult version of Narcissa Malfoy and knocking it out of the park. Looking forward to seeing Tim Burton's stylized art direction in this latest piece of work. Again, really amazing stuff. Tim Burton is one of my favorite directors.. up there with Kubrick, Lucas, Nolan, Spielberg, and Jackson... although I am more or less designing for the gaming industry.... which is the new Hollywood, far more lucrative and far more powerful.

Tim Burton Show "Wednesday" starring Jenna Ortega

One of my architectural designs done in a Tim Burton Style

NORWEGIAN WOOD

GREAT DESIGN IS "OPTIMIZED COMPLEXITY"

WHEN IT COMES TO DESIGN, ART, ANIMATION, VIDEO GAMES, AND VISUAL EFFECTS, WHEN IN DOUBT, IF THERE IS A SONG THAT YOU NEED TO PLAY IN ORDER TO GET YOUR HEAD THINKING STRAIGHT, IT'S 'NORWEGIAN WOOD'... AND IT'S THE BEST OF JOHN LENNON'S BEATLES. SO MUCH COMPLEXITY COVERED BY SO SIMPLE OF CHORDS... LIKE A COMPLEX SHAPE OR ENGINEERING SOLUTION BEING CONCEALED BY A GUI, PROTECTIVE CASING, STORE FRONT, WEB CRAWL, CONTROL RIG SETUP, OR REAL TIME CLOTH FOR A VIDEO GAME CHARACTER, THAT ENABLES THE WORK TO BE PICKED UP ON AND UNDERSTOOD SO QUICKLY- EVEN THOUGH THERE ARE MULTIPLE STROKES HAPPENING WITHIN THE SAME TIME FRAME. LYRICS... EASY ENOUGH FOR A CHILD TO PLAY WITH AND UNDERSTAND WITH LITTLE TRAINING, BUT DESIGNED IN A WAY THAT ARE COMPLEX AND LAYERED, AND CRAFTED IN A WAY THAT ONLY A GENIUS LIKE JOHN LENNON COULD MAKE. THAT'S WHAT MAKES GREAT ANIMATION AND DESIGN... "OPTIMIZED COMPLEXITY". OPTIMIZED COMPLEXITY IS KEY TO CREATING GREAT WORK: FIGURING OUT A COMPLEX SOLUTION TO A PROBLEM THAT THE DESIGN ENGINEER, WHETHER IT BE GAME, ARCHITECT, OR INDUSTRIAL DESIGNER, ADDRESSES, AND MAKING IT SO USER FRIENDLY, A NOVICE CAN COMPREHEND IT'S COMPLEXITY WITH LITTLE OR NO TRAINING. IF YOU HAVEN'T HEARD THEIR BEST SONG YET, DEFINITELY LOOK IT UP.

THANK YOU FOR YOUR CONSIDERATION

- JANGO RED -