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
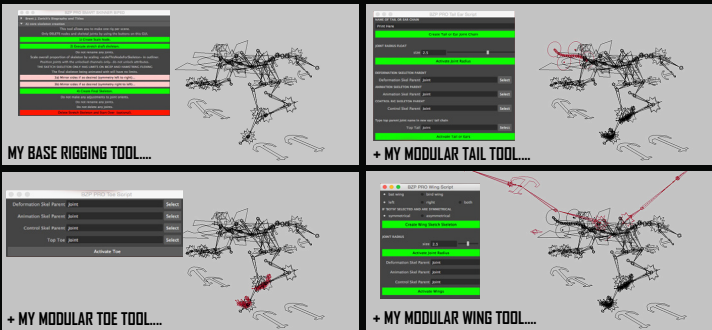
"BZP PRO (AUTODESK AUTH DEVELOPER)"

(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.
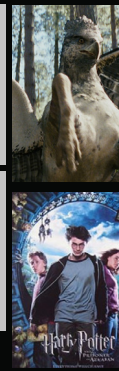
2ND ENTREPRENEURIAL VENTURE "SKETCHES OF BRENT ZORICH"

(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.
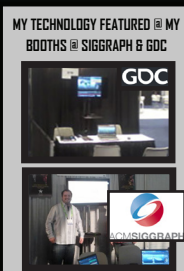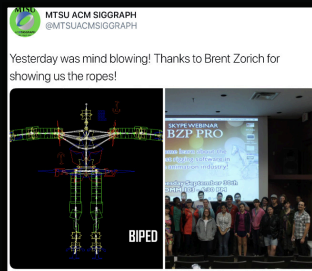
40   28   37
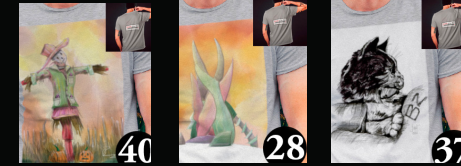
ENDORSEMENT FOR THE 1ST VENTURE

FROM ONE OF THE MOST RESPECTED IN

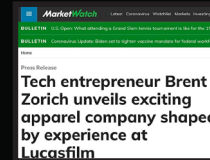THE ANIMATION INDUSTRY (THE SIGGRAPH

CHAIR) PUBLICLY REFERRING TO MY TECH AS

"MINDBLOWING" ON TWITTER.

MTSU ACM SIGGRAPH
@MTSUACMSIGGRAPH

Yesterday was mind blowing! Thanks to Brent Zorich for showing us the ropes!

BIPED

MY TECHNOLOGY FEATURED @ MY BOOTHS @ SIGGRAPH & GDC

2ND VENTURE FEATURE

"THE WALL STREET JOURNAL"

(MARKET WATCH)

MarketWatch

Press Release
Tech entrepreneur Brent Zorich unveils exciting apparel company shaped by experience at Lucasfilm
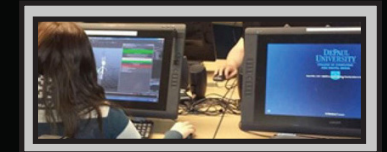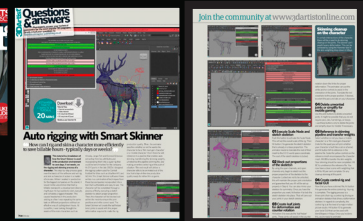
MY 1ST VENTURE'S TECHNOLOGY IN THE CLASSROOM

(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

3D Artist SURFACE SHADERS

WORLDWIDE 2 PAGE BIOGRAPHY

3D Artist

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

BZP Pro Smart Skinner

Maya rigging Set up your characters easily and efficiently using Smart Skinner

3D Artist 3DS MAX MASTERCLASS

1ST VENTURE DESIGNS ARE A WORLDWIDE COVER FEATURE

Auto rigging with Smart Skinner

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 I, 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. INQUIRIES 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 SPATIAL DESIGN, ARCHITECTURAL, AND WAYFINDING THEORY TO VIDEO GAME LEVELS/ ENVIRONMENTS THAT WOULD BE APPLICABLE TO CHIEF VISUAL OFFICER OPPORTUNITIES.

REDESIGNED RIGGING SYSTEM   LEAD RIGGING

RIGGING R AND D   LEAD RIGGING

REDESIGNED RIGGING SYSTEM   DAILIES COLOR CRITIQUING

COLOR CORRECTION   REDESIGNED RIGGING SYSTEM

RIGGING   RIGGING R AND D

LEAD RIGGING   DESIGN

REDESIGNED RIGGING SYSTEM   RIGGING FILM GAME CONVERGENCE

MONTHLIES EDITING   COLOR CORRECTION

RIGGING PROTOTYPING   MONTHLIES EDITING

RIGGING PROTOTYPING   RIGGING PROTOTYPING

LEAD RIGGING   COLOR CORRECTION

RIGGING PROTOTYPING   COLOR CORRECTION

EXTRA INFORMATION

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 VALUED AT 6 MILLION/ YEAR WHEN LICENSED. (26 MILLION IN VALUE IN ONE YEAR).

THE 12 SELF STANDING MONETIZED CASH COWS' SUMMARY

FINANCIAL DESIGN STRATEGY SUMMARY: 38 MILLION (20 MILLION PLUS 18 MILLION) OF POSSIBLE INCOME GENERATED IN ONE YEAR WITH A POTENTIAL ACQUISITION ON THESE E-COMMERCE VENTURES BY MAINTAINING A SPENDING OF ONLY $2200.00 ANNUALLY ($1500 PLUS $700). THESE ARE SELF STANDING ENTITIES (CASH COWS) THAT GENERATE REVENUE WITH LITTLE TO NO MAINTENANCE.

12 CASH COWS:

1. **1ST VENTURE: 'THE SMART SKINNER' AUTO RIGGING PLUG-IN** VALUED AT 20 MILLION BY THE HOTH SUPERVISOR ON STAR WARS THE EMPIRE STRIKES BACK'S CGI BUSINESS PARTNER IN 5 ACQUISITION REVIEWS (3 FORTUNE 500 COMPANIES). SIGGRAPH AND GDC BOOTH REPRESENTATION. 80 HOURS OF ILM LEVEL RIGGING AND SKINNING COMPLETED IN 15 MINUTES. SIGGRAPH CHAIR QUOTED TECH AS 'MINDBLOWING'. WORLDWIDE MAGAZINE (3D ARTIST ISSUE 76) COVER FEATURE. 250 SCHOOLS RECEIVED TECH ON 6 CONTINENTS. 20 MILLION POTENTIAL ROI IN ACQUISITION WITH ONLY $1500.00 ANNUAL BURN (PLUG-IN MAINTENANCE): E-COMMERCE.

2. **2ND VENTURE: 'SKETCHES OF BRENT ZORICH' VIDEO GAME CONCEPT DESIGNS ON OVER 50 T-SHIRTS, 25 HOODIES, AND 40 WALL MOUNTED PRINTS** (VALUED BY THE PR FIRM OF GOOGLE, FACEBOOK, DISNEY, AND AMAZON, AT 6 MILLION PER YEAR). 'GQ' MAGAZINE & 'VOGUE' MAGAZINE INTEREST. WALL STREET JOURNAL 'MARKET WATCH' STORY. DROP SHIPPING AND PRINT ON DEMAND WITH A CANADIAN MANUFACTURER HANDLING ALL PRODUCTION AND SHIPPING: NO BACK INVENTORY. 18 MILLION POTENTIAL ROI WITH ONLY $700.00 ANNUAL BURN (3 YEAR VALUATION)- $600.00 FOR SHOPIFY AND $100.00 FOR WEBSITE: E-COMMERCE.

3. **'CITY BUILDER' PLUG-IN. ZERO ANNUAL BURN** AND RETAILING FOR $99.99 (I HAVE NOT BEEN APPROACHED ABOUT ACQUISITION OF THIS IP YET BUT HAVE HAD SALES): E-COMMERCE.

4. - 12. EIGHT **6 DIGIT COLLECTIVE BROKERAGES DESIGNED WITH MERRILL & SCHWAB** EARNING $$$$ INDEPENDENTLY WITH NO MAINTENANCE: 8% ANNUAL GROWTH. NOTE: I EARNED OVER $33,000 IN PASSIVE INCOME THAT IS COLLECTIVE IN THE MONTHS OF NOVEMBER AND DECEMBER '23 ALONE FROM THESE (4.-12.) CASH COWS.

THE 5 ACQUISITION REVIEWS ADVISED TO NOT GO BELOW 20 MILLION ON THE 1ST VENTURE

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. DEAL BROKERED BY HARVARD MBA THAT WAS A GOLDMAN SACHS ALUM.

- (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.

MY WALL STREET JOURNAL "MARKET WATCH" ARTICLE ON MY 2ND VENTURE

MarketWatch   Latest   Coronavirus   Watchlist   Markets   Investing   Barro

BULLETIN   U.S. Open: What attending a Grand Slam tennis tournament is like for the 1% →

BULLETIN   Coronavirus Update: Biden set to tighten vaccine mandate for federal workforce →

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.

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Inside guide to industry news, studios, expert opinion & education

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 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?*
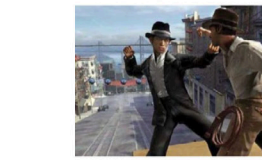
BZ: I needed a complete understanding of physiology of humans built for strength and speed. Because I was an athletic trainer who trained football players, it came to me naturally. I know how a football player flexes, I know how they run and sprint and I know how they get prepared for collision. Often, 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?*
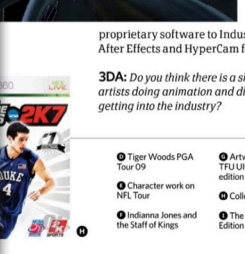
BZ: My best advice to any student is try to do an internship in a studio. Do not rush to get out of school; stay in and develop your craft. Finally, do the Buckbeak test as I mentioned above.

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. Whatever 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* made 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 video games 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

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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!

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.

ESTIMATED TIME TO COMPLETE THE TUTORIAL
20 MINS
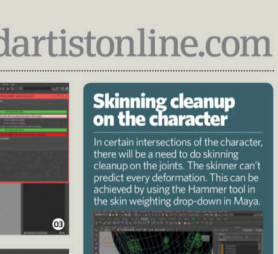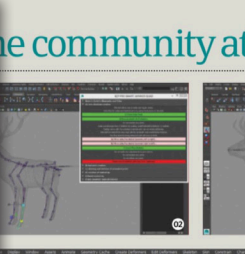
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