FOR ACQUISITION CONSIDERATION

info@bzppro.com

THE SMART SKINNER SOFTWARE

- 250 Universities on 6 Continents -

- Several VFX/ Military Studios -

BZP PRO

BZP PRO

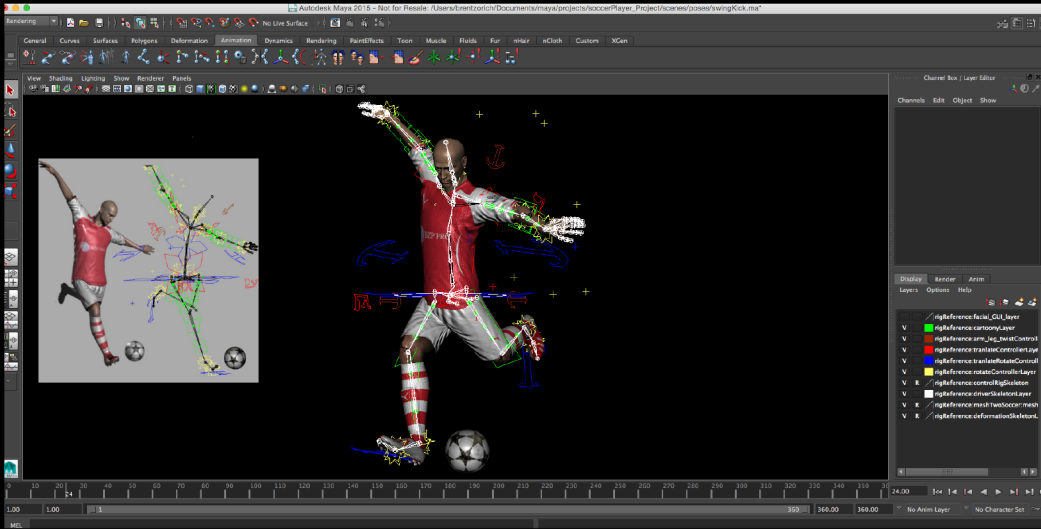**NO GAMES. JUST RIGS. DEADLINES FEAR US.**

AUTODESK.
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THE BZP PRO SMART SKINNER SOFTWARE

80 HOURS OF RIGGING IN MINUTES

SMART SKINNER CUSTOMER TESTIMONIALS

"saves a tremendous amount of time and is easy to use....."

Mike Libonati, Professor at Cal State

"This will help my students work more efficiently in the pipeline."

Michael Bonitatis, Professor at East Los Angeles University

"straight forward and easy to follow."

Kai Lin C., Student at Drexel University

"I'm absolutely in love with it"

Miguel G., Student at Drexel University

" BZP PRO is the smartest auto-skinner on the market."

Ray Hassan, Professor at Purdue

"get through the character setup process with very little effort."
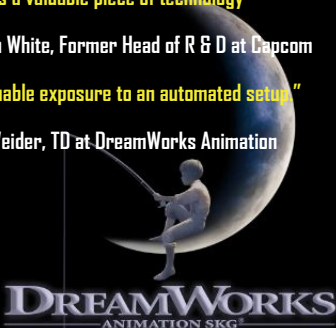
Kwame Hawkins, Professor at Living Arts College

"This is a valuable piece of technology"

Keaton White, Former Head of R & D at Capcom

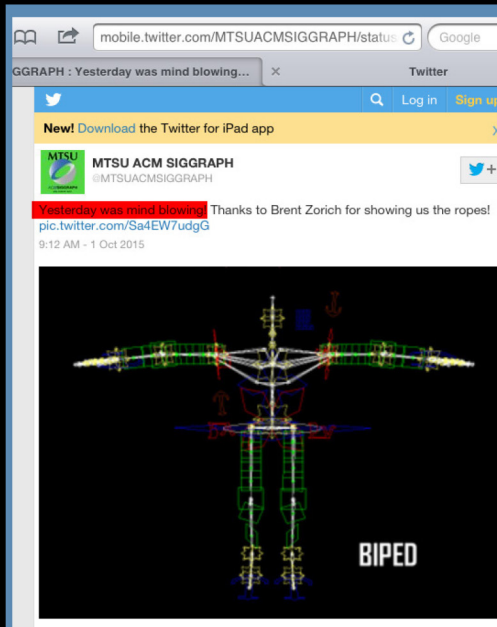"invaluable exposure to an automated setup "

Alan Weider, TD at DreamWorks Animation

DREAMWORKS
ANIMATION SKG

SMART SKINNER SOFTWARE PRICING

BZP PRO SMART SKINNER BIPED
$250.00 PROFESSIONAL
$125.00 ACADEMIC

BZP PRO SMART SKINNER QUAD
$250.00 PROFESSIONAL
$125.00 ACADEMIC

OVERWHELMINGLY POSITIVE PRESENTATION TO THE SIGGRAPH CONFERENCE CHAIR AND STAFF: "MIND BLOWING"- one of the most powerful people in graphics
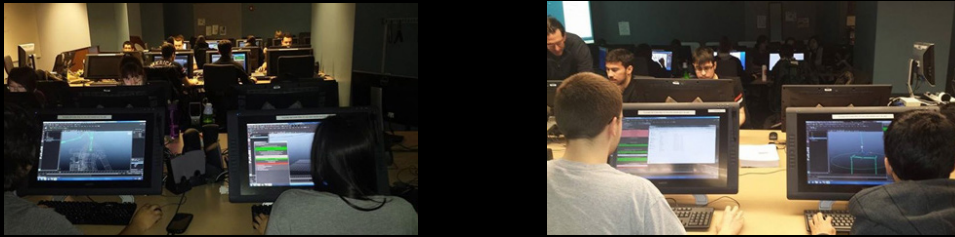
SIGGRAPH 2015
Xroads of Discovery

3D Artist — 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 five 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
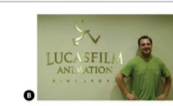
A Character rigging on SW Force Unleashed
B Brent at Lucasfilm Animmation
C NCAA college football from EA

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

As a point of reference, The Mac Pro Tower was valued at a 9/10. BZP PRO was 1 point away from the highest reviewed Personal Computer on the market.

3D Artist

www.3DArtistonline.com

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Create reflections, materials & details in your best work ever

CREATE THIS IMAGE

BEGINNER'S GUIDE TO TEXTURING
From the basics to the complex, master any texturing project

All tutorial files can also be downloaded from: www.3dartistonline.com/files

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BZP PRO Smart Skinner • **Review**

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 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.

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

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

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

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

3DArtist ● 101

3D Artist Questions & answers

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

Brent J Zorich

Brent is a clever chap, having written his own Smart Skinner for Maya. On p76 he reveals how using the Smart Skinner for auto-rigging can save you hours of time.

ESTIMATED TIME TO COMPLETE THE TUTORIAL 20 MINS

Download
Tutorial files:
• Tutorial screenshots
• Video tutorial
• 30-day trial of Biped
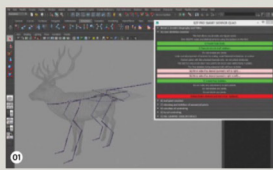• 30-day trial of Quad

filesilo.co.uk/3dartist-76

Auto rigging with Smart Skinner

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

3D Artist

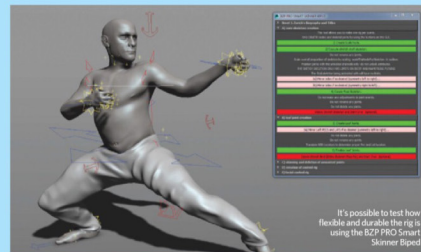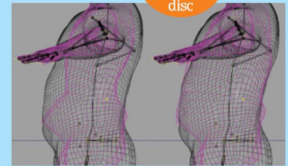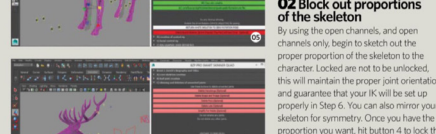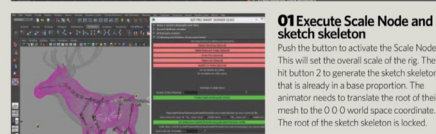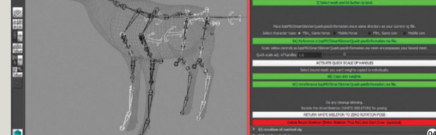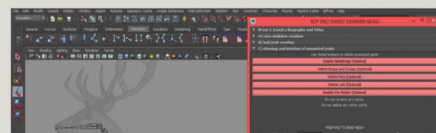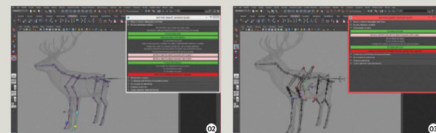**5GB OF FREE ASSETS** EQUIVALENT TO 8 DISCS

3DS MAX MASTERCLASS

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.

76 ● 3DArtist

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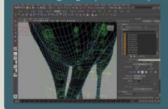
rotation down the limbs for proper deformation. The animator can use the white anchor controls to assist in the orientation of the joints. Translate the red crosshairs to the proper position, if desired, to orient the pecs and lats on your character.

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

3DArtist ● 77

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PROJECT SAVINGS IN REGARDS TO LABOR USING SMART SKINNER SOFTWARE FOR A STUDIO: METRICS

7 RIGS COMPLETED IN CASE STUDY

NOTE: Does NOT include facial sculpts, corrective sculpts, toes, tails, or rabbit ears
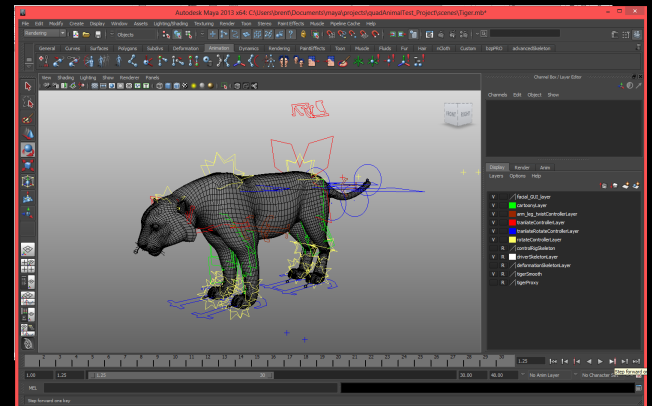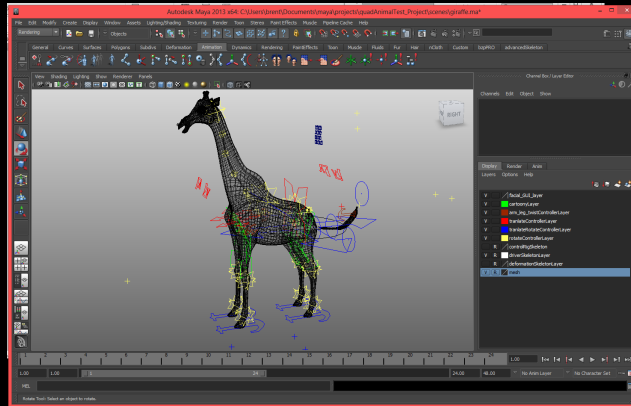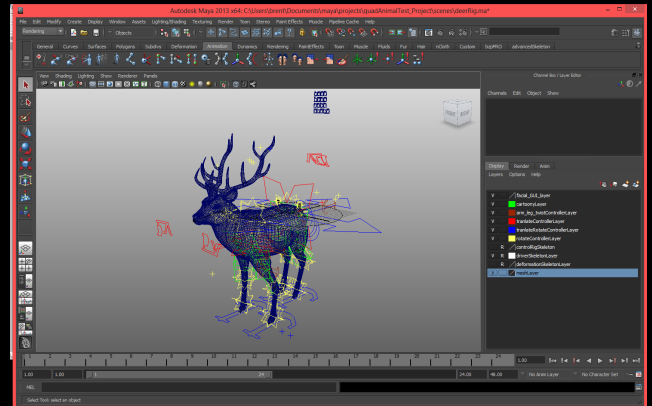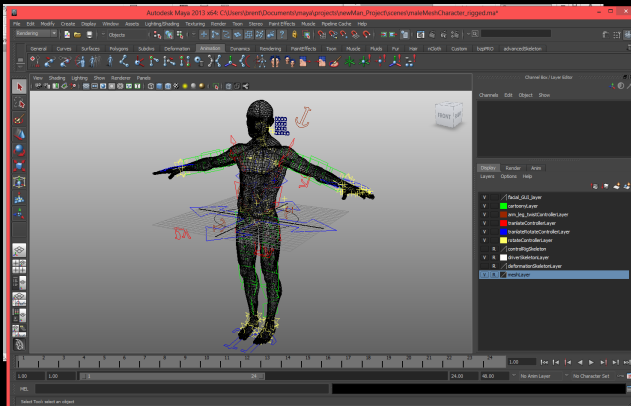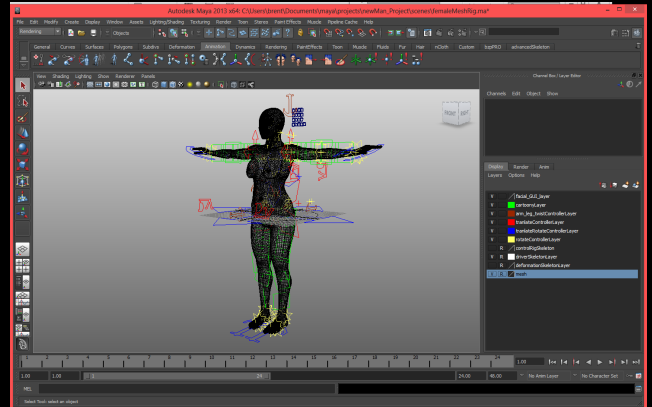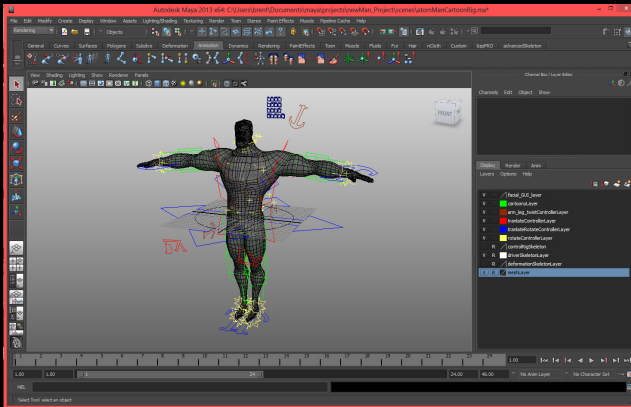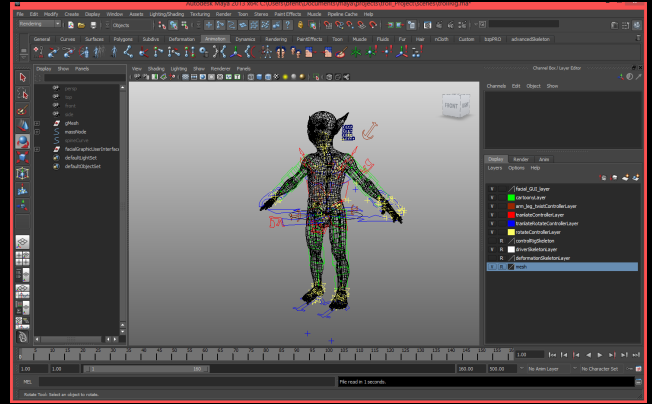
BILLABLE LABOR WITHOUT BZP PRO SOFTWARE :

560 HOURS TOTAL FOR ALL SEVEN (80 HOURS EACH)

$112,000 @ $200 per hour in labor costs

BILLABLE LABOR WITH BZP PRO SOFTWARE :

3.5 HOURS TOTAL FOR ALL SEVEN

$700 @ $200 per hour in labor costs

COMPANY SAVINGS WITH BZP PRO: 556.5 HOURS or $111,300.00

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SALES STRATEGY FOR FREELANCE BZP PRO CUSTOMERS IN REGARDS TO LABOR COSTS: METRICS

SENIOR TD AT SONY IMAGEWORKS
HOURLY RATE: $80.00 PER HOUR: 165K yearly

CHARACTER LABOR COSTS FOR FREELANCERS WITHOUT BZP PRO

- 1 Rigged Character turnaround time = 80 hours
- 80 hours X $80.00 Per Hour = $6400.00 for labor per rig

BZP PRO HAD BEEN CONTACTED BY A THIRD PARTY TO RIG AT A RATE OF $6200.00 PER CHARACTER

CHARACTER LABOR COSTS FOR FREELANCERS WITH BZP PRO

- 1 Rigged Character turnaround time = .5 hours
- .5 hours X $80.00 Per Hour = $40.00 for labor per rig

CLIENT BILLING STRATEGY FOR FREELANCE BZP PRO CUSTOMERS
- Charge $4000.00 for labor per rig as opposed to $6400.00

INCREASES LABOR PROFIT BY $3960.00 PER RIG: $4000 - $40 : STILL 30% < $6400 CHARGING RIGGERS

- Rig turnaround time: .5 hour as opposed to 80 hours

NEW HOURLY RATE: $8000.00 per hour ($4000.00 X 2) as opposed to $80.00 per hour

SCENE DONE TRADITIONALLY WITHOUT BZP PRO: 160 HOURS OF RIGGING
SCENE DONE WITH BZP PRO: 1 HOUR OF RIGGING

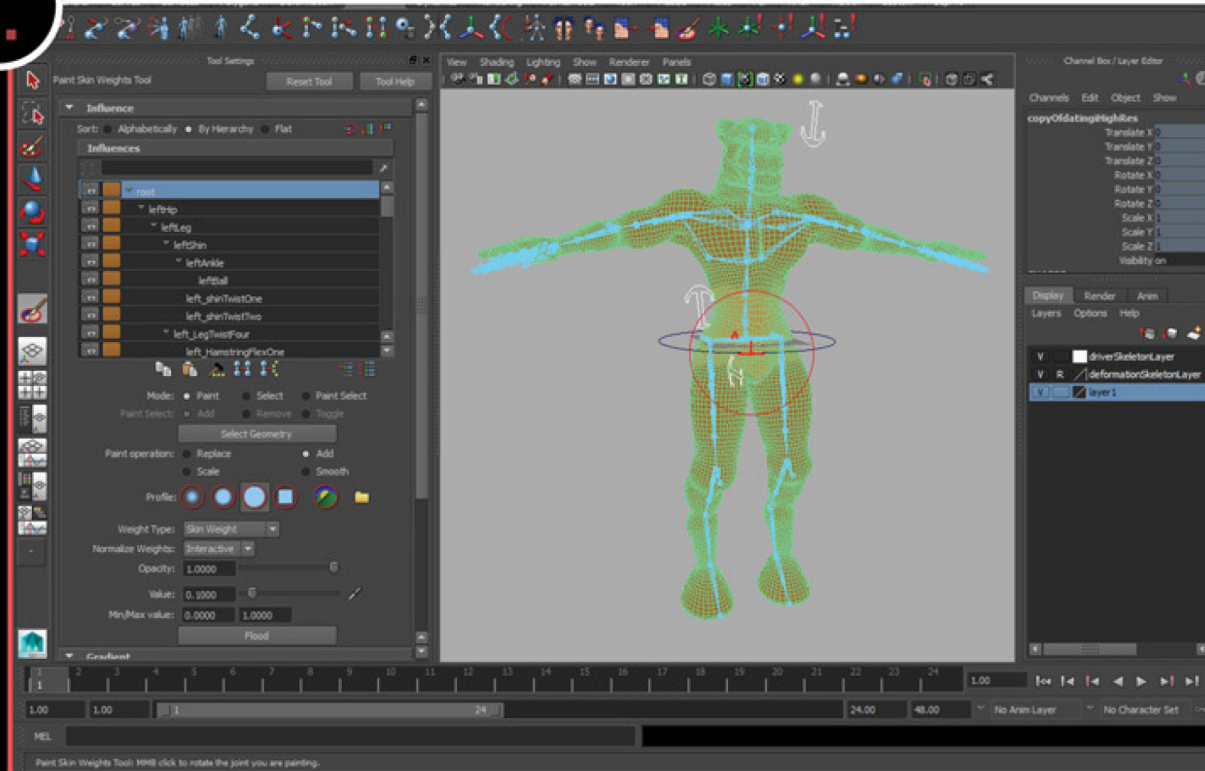$8000.00!
2 characters
1 hour!

BZP PRO

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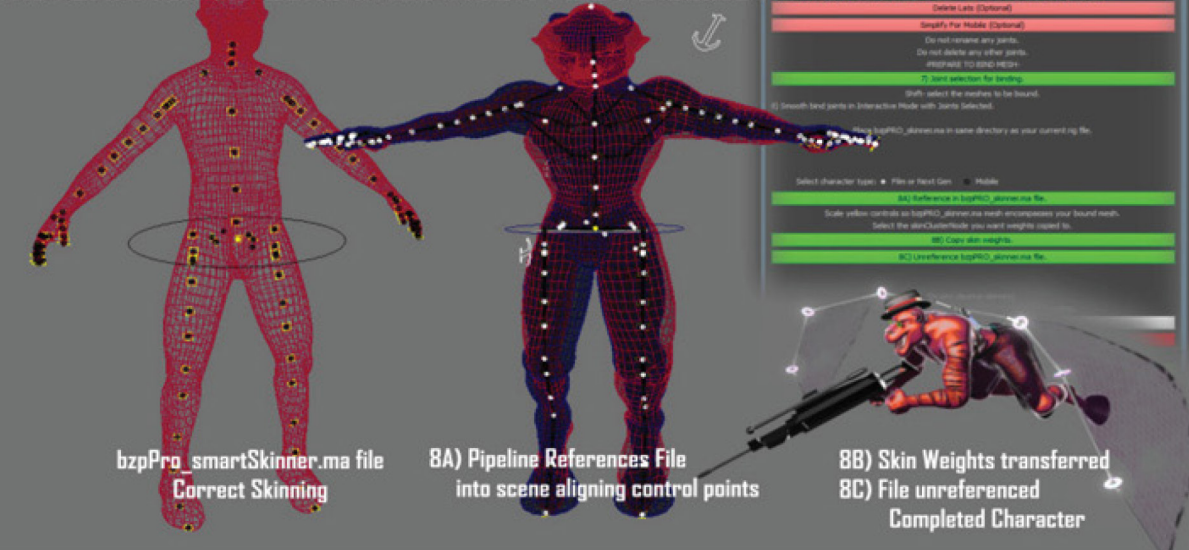
SMART SKINNER RIG BREAKDOWN PART 1: SKINNING

TIME SAVINGS FOR CHARACTER TECHNICAL DIRECTION SKINNING FOR BIPED AND QUAD: METRICS

1. SKINNING DONE TRADITIONALLY WITHOUT BZP PRO: UP TO 10 HOURS

2. SKINNING DONE WITH BZP PRO: 10 MINUTES

AUTOMATICALLY GENERATED MULTI FILE PIPELINE AUTOMATING SKINNING
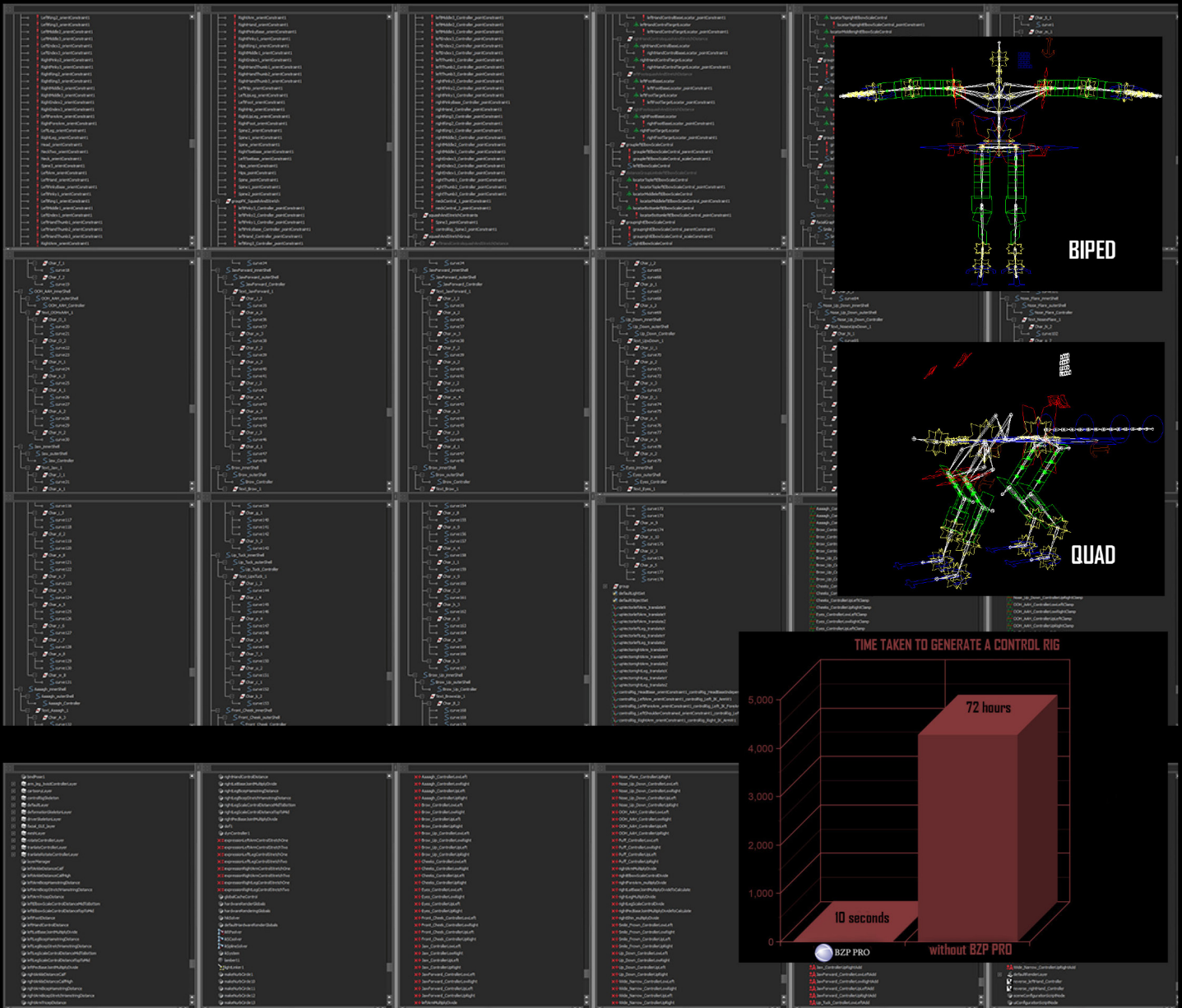
bzpPro_smartSkinner.ma file
Correct Skinning

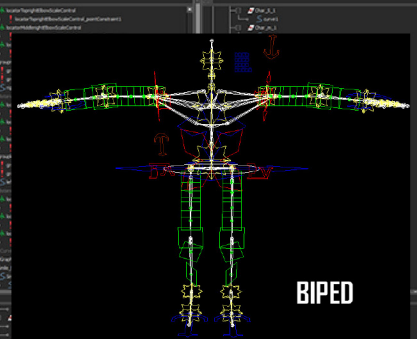8A) Pipeline References File
into scene aligning control points

8B) Skin Weights transferred
8C) File unreferenced
Completed Character

BZP PRO

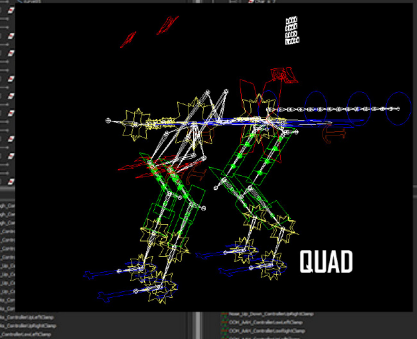NO GAMES. JUST RIGS.
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SMART SKINNER RIG BREAKDOWN PART 2: CONTROL RIG

LEVEL OF COMPLEXITY OF CONTROL RIG: 2135 NODES GENERATED INSTANTLY IN OUTLINER

BIPED

QUAD

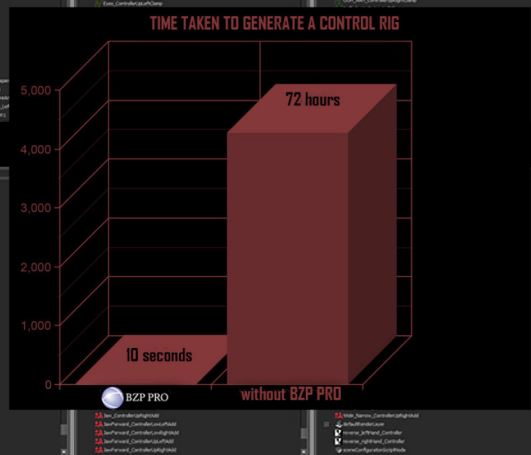TIME TAKEN TO GENERATE A CONTROL RIG

72 hours

10 seconds

BZP PRO   without BZP PRO

CONTROL RIG SAVINGS **WITHOUT** BZP PRO SOFTWARE:

2135 NODES X 2 (MINUTES SPENT PER NODE) = 4270 MINUTES **(72 HOURS)**

CONTROL RIG SAVINGS **WITH** BZP PRO SOFTWARE:

2135 NODES = (10 SECONDS)

COMPETITION

- **MIXAMO** is the one competitor in this space: No longer a factor!!

- They raised **$12** Million from **VC's**

- Estimated **300,000** registered users

- They offer a rigging service

- Acquired by **Adobe** in June 2015: To be integrated into Photoshop

- Big opportunity for BZP to fill the void for Mixamo's user base

- VFX and Game studios rarely use Photoshop for animation

- Validates potential exit

THE MARKET OPPORTUNITY

- Estimated global market of over 10,000,000 potential users
  - Total market: $1-3 billion license revenue potential

- Target Market based on current technology
  - 500 K Autodesk Maya Users
  - Total addressable market: $50-150 million license revenue potential

- Millions of animators can be served with adoption of Smart Skinner as a plug in for major animation software systems.
  - Animation website www.creativecrash.com claims 5.5 million users
  - Unity Game Engine claims 5 million users
  - 3DS Max installed base of 500,000
  - Lightwave , Cinema 4D, Foundry installed bases likely around 2 million users
  - Numerous other software packages

GO-TO-MARKET STRATEGY

• Channels: direct calls; conventions; value added resellers

• Create a loyal customer base and brand awareness by donating to Universities = student purchases and professional sales

> • Students learn how to Rig with the Smart Skinner and when they become professionals they request it at the work place

• Smart skinner annual subscription prices: $250 commercial; $125 academic

• Additional channels for revenue

> • $ 250 Quadruped license

> • Animation library to generate additional revenue

> • Blend shape library

> • 3D models for sale

EXECUTIVE SUMMARY

• BZP PRO Smart Skinner meets the need for faster rigging and skinning

• Saves 80 hours per character, and will save production thousands of dollars

• Global potential market of $1-3 Billion in license revenue once ported to other softwares

• Target market for current technology: $50-150 million in license revenue annual

• Target market for restructured technology: $400 million in license revenue annual

Potential Exit with sale to Autodesk, Adobe, Unity, ETC...

LLC ACQUISITION INQUERIES: info@bzppro.com

THANK YOU FOR YOUR CONSIDERATION