

BRENT J. ZORICH MA BSID

STARTUP LEVEL CHIEF VISUAL OFFICER

WORLDWIDE PUBLISHED TECHNOLOGY & FASHION ENTREPRENEUR

XBOX, NINTENDO, AND PLAYSTATION DEVELOPER

BRENTZORICH.COM SKETCHESOFBRENTZORICH.COM

CONTACT: LINKEDIN.COM/IN/BRENTZORICH

THREE PASSIVE INCOME STREAMS OVER 200 SELF DESIGNED E-COMMERCE PRODUCTS

DESIGNING AN OPPORTUNITY THAT IS MAINTAINED FOR ONLY \$180.00/MONTH THAT CAN GENERATE 26 MILLION AS A RETURN ON INVESTMENT WITH ONLY 100 HOURS OF ANNUAL LABOR.

Designed Personal Brokerages

1ST PASSIVE INCOME: THE MARKET
-LABOR: 5 HOURS/ MONTH
2022-Current

INTERNATIONAL INVESTOR (NYSE & SINGAPORE SE)

-Due To "Bull Market" Investing:
Net Worth Over 1 Million & Growing
-Portfolio Doubling in 7 Years While Still
Spending 1/2 of Earned Annual Interest

-Recruited by Stanford, Northwestern, & Brown
for 2nd Masters (MBA)
-Passive Investments Returning Over 8 Percent
(6 Digit Passive Annual Returns)
(\$185,000 pre-tax in '24 alone)

SketchesOfBrentZorich

2ND PASSIVE INCOME: SHOPIFY
-2ND VENTURE W/ PRODUCTS: ACTIVE
-ANNUAL BURN: \$700.00
-LABOR: 5 HOURS/ MONTH
-POTENTIAL ROI: 18 MILLION
-DEV TYPE: ILLUSTRATION
2021-Current

PART TIME ENTREPRENEUR

-E-Commerce Clothing Line
Featuring My Game Sketches
(Print On Demand: Drop Shipping)
-Due To Size In Gaming, Approached By
The PR Of Michael Jackson About
Representation
-Ralph Lauren Manufacturer Prod. Interest

-Projections by the PR Firm of Google, Facebook, Amazon,
& Disney of 6 Million Per Year (CHMW)
-Approached by the PR Firm of 'GQ' and 'Vogue'
-8 COASTERS: \$8.00 -2 POLOS: \$40.00
-6 BOTTLES: \$33.00 -2 JACKETS: \$70.00
-3 ART NOTEBOOKS: \$22.00 -2 BAGS: \$50.00
-42 WALL PRINTS: \$28.00 -5 CARDS: \$15.00
-62 SHIRTS: \$38.00 -24 HOODIES: \$56.00

Adobe Photoshop

-LABOR: 2 HOURS/ MONTH
2019-Current

PART TIME CONSULTANT

Volunteer Pre Release Team
In Exchange for Free Software

Sony & Walt Disney

-LABOR: 120 MINUTES
2017 & 2019

TECHNICAL CONSULTANT

-MoCap Rigging Completed By
My Authored BZP PRO Autorigger
(Six Characters)

-Sub Contract Rigging R & D
-480 Hours Of Labor Engineered In 120 Minutes
Via Vitruvian Entertainment with BZP PRO
-T.O.T.S -VAMPIRINA -GUARDIANS OF THE GALAXY 2

BZP PRO Maya Plug-Ins

3RD PASSIVE INCOME: SHOPIFY
-1ST VENTURE W/ PRODUCTS: ACTIVE
-ANNUAL BURN: \$1500.00
-LABOR: 1 WEEK/ YEAR
-POTENTIAL ROI: 20 MILLION
-DEV TYPE: TECHNICAL DIRECTION
2011-Current

PART TIME ENTREPRENEUR (3 FORTUNE 500 ACQU REVIEWS)

STARTUP LEVEL CHIEF VISUAL OFFICER
-Siggraph & GDC Booth Owner
-250 Universities Licensed Tech On 6
Continents Globally Via A Freemium
Model: Advised Not to Sell Below 20m
-Modular Rigging Design: Bipod, Wings, Quad

-Raised Investment Money from Alum of Harvard & Yale
with an Addressable Market of only 100,000
-Innovated New Skinning Technique That Completes
80 Hours of ILM Level Rigging & Skinning In 15 Min
-Facebook LLC Had 90 Less Licensed Universities In
Same Allotted Time (Source: The Social Network)
-Harvard Business Angels Mentorship
-Volunteer Collegiate Lecturing: 40 Universities
-Designed Pitch Decks that were used to Pitch VCs
-Siggraph Chair Quoted Autorigger as "Mindblowing"
-Due to mimicking Mark Zuckerberg, can send out mass
communication to faculty and student body of over
250 Universities (globally) on six continents via email
-SMART SKINNER AUTORIGGER: \$299.99
-CITY BUILDER TOOL: \$99.99
-BLEND SHAPE MIRROR TOOL: \$29.99

PITCH SKILLSET OFFERED TO A VIDEO GAME COMPANY: A DIGITAL CRAFTSMANSHIP THAT CREATED WORLDWIDE MAGAZINE COVER PUBLISHED LUCASFILM LEVEL AUTORIGGERING TECH VALUED AT 20 MILLION IN 5 ACQUISITION REVIEWS (3 FORTUNE 500S); AND ADOBE PHOTOSHOP GAME CONCEPT DESIGNS PROJECTED AT 6 MILLION A YEAR WHEN LICENSED. (26 MILLION IN VALUE IN ONE YEAR). AT ONLY PART TIME, I CO-DEVELOPED A MARKETING PRODUCT IMPLEMENTATION STRATEGY THAT OUT PENETRATED FACEBOOK LLC IN UNIVERSITY LICENSING PRE-ANGEL INVESTMENT ON SIX CONTINENTS; AS WELL AS CREATED RETAIL VENUES AT THE DESIGN LEVEL OF THE ARCHITECTURE FIRM RANKED NUMBER ONE IN THE WORLD THAT CAN POTENTIALLY DISPLAY AND SELL THE GAME TITLES THAT I'M WORKING ON.

- NAMED "1 OF TOP 100 IN TECHNOLOGY" AT THE INTERCON CONFERENCE SPONSORED BY FACEBOOK & AMAZON
- OHIO STATE ACCAD: MA ('11) - BSID ('98) ■ STANFORD: CONTINUING STUDIES ENGINEERING ('20)
(MA THESIS: DESIGNING AN AUTORIG FOR A PREHISTORIC ANIMAL IN PYTHON)
- FEATURED IN 'THE WALL STREET JOURNAL'S MARKET WATCH'
- INVITED TO BE A PUBLISHED BOOK AUTHOR ON BUSINESS FOR 'FORBES PUBLISHING'
- ALUM OF SIGMA ALPHA EPSILON: THE NATION'S LARGEST FRATERNITY
- SOFTWARE: MAYA, PHOTOSHOP, PYTHON, MEL, ADOBE SUITE, ILM'S BLOCK PARTY RIGGING SOFTWARE

Lucasfilm, Ltd.

-ILM
-LUCASARTS
-LUCAS SINGAPORE
2008-2009

THE EXPOSURE TO THE RIGGING TECHNOLOGIES OF THESE TOP COMPANIES LED TO THE DESIGN OF THE FIRST PASSIVE VENTURE, BZP PRO, THAT WAS VALUED AT 20 MILLION.

SENIOR TECHNICAL ARTIST (FOCUSED ON RIGGING)

-BEST PRACTICES COMMITTEE Selected By
Former CTO Of Peter Jackson's Weta
Digital (1 Of 10 Members: Meeting Monthly)
-Rigging QA: Grievous, Padme, Anakin,
Standard ILM Bipod, ILM Quad, ILM Wings,
ILM's Block Party Rigging Software
-Key Rigging: Boba Fett, Jabba The Hutt,
Cover Of The Force Unleashed
-EXECUTIVE TRAINEE: 'Engaged Leadership'
-Board of Directors Proposal Submission
'Offensive Attack Strategy'
-Film Game Convergence Specialist

-Work Shown to George Lucas:
Jango Fett & Ahsoka Tano R & D
-Skywalker Ranch -Weekly ILM R & D
-STAR WARS FORCE UNLEASHED (OLC)
LEAD RIGGING
-STAR WARS CLONE WARS
COLOR CORRECTION: OBI-WAN & CAD BANE
-INDIANA JONES & THE STAFF OF KINGS
STEVEN SPIELBERG PROJECT ALUM
-TRANSFORMERS REVENGE OF THE FALLEN
DAILIES: OPTIMUS PRIME & DEVASTATOR
-HARRY POTTER HALF BLOOD PRINCE
MONTHLIES EDITING: HARRY & DUMBLEDORE
-STAR WARS FORCE UNLEASHED II R & D

EA SPORTS

2005, 2007-2008

DUE TO SKILLSET, APPROACHED BY OSCAR WINNING DIGITAL DOMAIN, DREAMWORKS, AND RHYTHM & HUES DURING EMPLOYMENT

LEAD RIGGER CENTRAL FOOTBALL

-Central Football Rigging System Designer
(10k Animations Retargeted To My
Setup's New Proportions On EA'S
Top Title In North America)
-Global Rigging With EAC'S Bodyswap
-ASSOCIATE TECHNICAL ARTIST

-Highest Rated **MADDEN NFL XX** on IGN (9.1)
-SUPERMAN RETURNS -NFL TOUR
-NFL COACH -NCAA FOOTBALL 09 & 08
(Mockups): **-TIGER WOODS PGA TOUR 09 -MMA**
GLOBAL ADVISEMENT (Rig Swapping):
-HARRY POTTER & ORDER OF PHOENIX
-FACEBREAKER -NHL -NBA LIVE -FIFA

Take-Two Interactive

2006

RIGGING TECHNICAL ARTIST

NBA 2K & COLLEGE HOOPS 2K

-Tech tested on data of Shaquille O'Neal

DreamWorks SKG

2005

TRAINED BY THE GLOBAL RIGGING SUPERVISOR

6 MONTH PARTICIPANT

-Outreach Program Attendee @ DSU
-Trained by Supervisors on
Shrek, Shark Tale, Madagascar,
Spider-Man 2, Finding Nemo

Discovery Channel

"BRAVE NEW PICTURES"
2003-2005

MODELLER ■ RIGGER ■ COMPOSITOR

-My Academic Advisor Was The Founder of the
Computer Animation Division at Ringling

Worked with Paleontologists from
Jurassic Park via ACCAD at DSU
-THE MYSTERY DINOSAUR

Gensler ■ NBBJ

#1 & #2 DESIGN FIRMS GLOBALLY
1998-2001

ARCHITECTURAL THEORIES
LEARNED CAN BE APPLIED TO
VIDEO GAME LEVEL DESIGN
IN ADDITION TO RETAIL AND
MERCHANDISING OF THE
VIDEO GAME PRODUCT

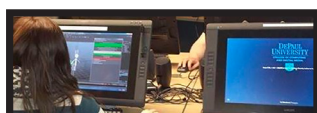
RETAIL ARCHITECTURAL DESIGNER

-Flown Between Gensler Locations to
Handle Marker Rendering
-In Crit Sessions with World Famous
Architects Friedl Bohm &
M. Arthur Gensler
-For Several Weeks Shadowed a
Former Architect of Frank Gehry
-ADIDAS -VW -LINCOLN MERCURY
-REPUBLIC OF CHINA -GTE -SIU

Nike '98 ■ Reebok '97

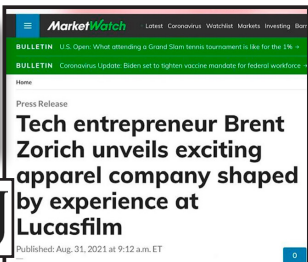
INDEPENDENT DESIGN WORK

Design Prototype Pitching



ONE OF 250 SCHOOLS THAT USED
MY AUTORIGGER IN THE CLASSROOM

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

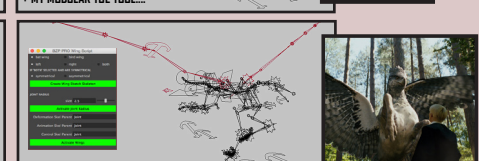
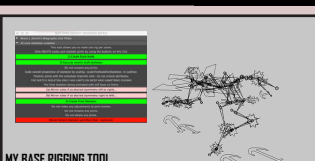
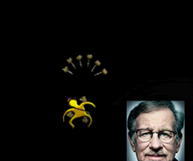
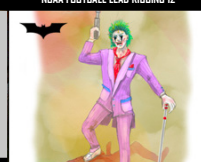
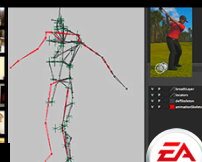
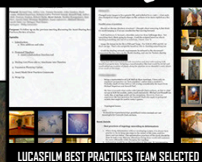
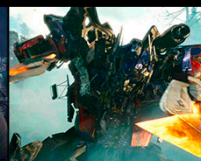


EXTRA INFORMATION

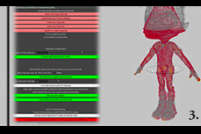
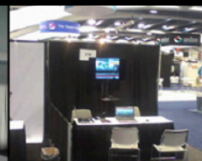
BRENT J. ZORICH: PROJECTS
BRENTZORICH.COM
WORLDWIDE PUBLISHED TECH &
FASHION ENTREPRENEUR

- (01) SOFTWARE AND TOOL DEVELOPMENT
- (02) DISNEY FEATURE ANIMATION PROTOTYPING
- (03) SONY PICTURES PROTOTYPING
- (04) THE FORCE UNLEASHED ULTIMATE SITH EDITION
- (05) INDIANA JONES AND THE STAFF OF KINGS
- (06) STAR WARS: THE CLONE WARS
- (07) TRANSFORMERS REVENGE OF THE FALLEN
- (08) HARRY POTTER AND THE HALF BLOOD PRINCE
- (09) EA SPORTS MMA
- (10) NFL TOUR
- (11) NFL HEAD COACH 09
- (12) NCAA FOOTBALL 09
- (13) MADDEN NFL 09
- (14) TIGER WOODS PGA TOUR 09
- (15) MADDEN NFL 08
- (16) NCAA FOOTBALL 08
- (17) COLLEGE HOOPS 2K8
- (18) COLLEGE HOOPS 2K7
- (19) NBA 2K8
- (20) SUPERMAN RETURNS: THE GAME

- (21) THE MYSTERY DINOSAUR
- (22) VOLKSWAGEN
- (23) THE BEJING HOTEL
- (24) THE FORCE UNLEASHED II
- (25) NIKE THESIS
- (26) REEBOK GOLF SANDAL
- (27) ADOBE PRE RELEASE TEAM
- (28) COVERAGE BETWEEN ILM'S JANGO FETT & FILM'S AHSOKA TANO ON THE XBOX

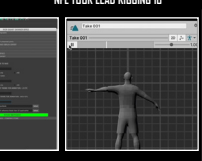
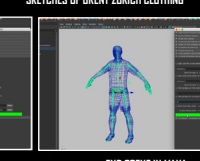
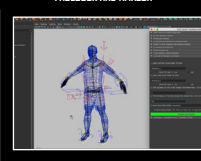
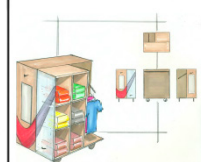
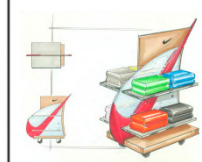
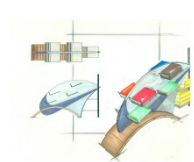
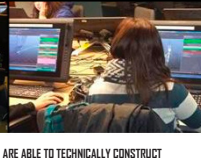
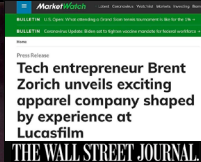


MODULAR ENGINEERING CASE STUDY ON BUCKBEAK FROM HARRY POTTER 3 WITH MY SOFTWARE | AUTHORED: 90 HOURS OF WORK COMPLETED IN 5 MINUTES



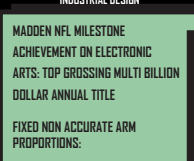
AUTOSKINNING PIPELINE WITH PROXY TECHNOLOGY:

1. START WITH YOUR MESH
2. REFERENCE IN PROXY WITH CORRECT SKINNING VIA GUI
3. SCALE UP PROXY
4. TRANSFER SKIN WEIGHTS AND UNREFERENCE VIA GUI



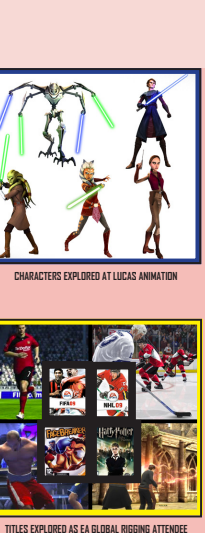
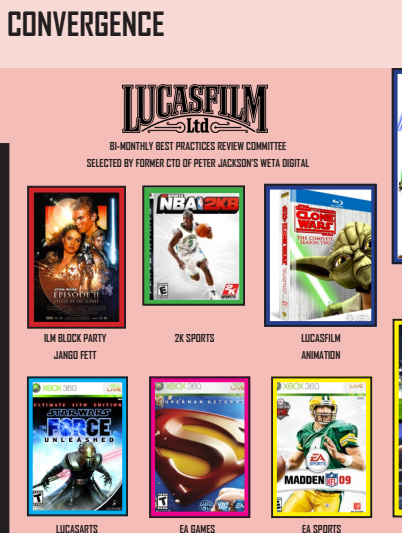
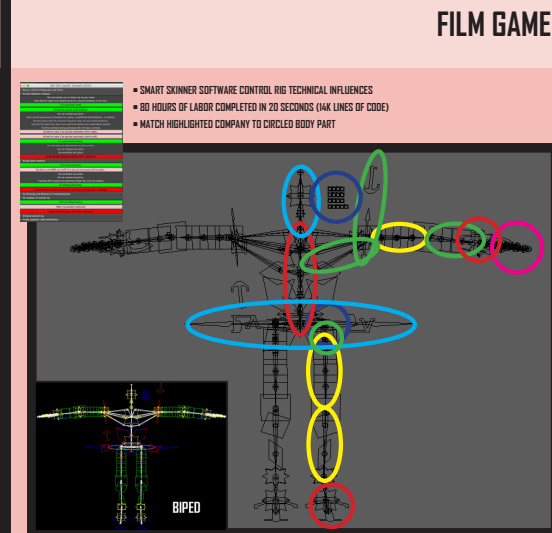
AUTOMATED MOTION CAPTURE TECHNOLOGY

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



FIXED NON ACCURATE ARM PROPORTIONS: ENTIRE 10K ANIMATION LIBRARY RETARGETED TO MY RIG SETUP

FILM GAME CONVERGENCE



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.

T here 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



2008-9 Star Wars: The Force Unleashed, Ultimate Sith Edition

2009-9 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 3X3

2006 College Hoops 2K7

2006 Supermen Returns: The Videogame

2003-5 The Mystery Dinosaur for The Discovery Channel

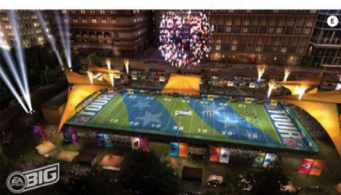
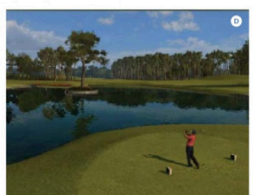
Character rigging on SW Force Unleashed

Brent at Lucasfilm Animation

NCAA college football from EA

portBoba highlights

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



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 2* 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 the 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?

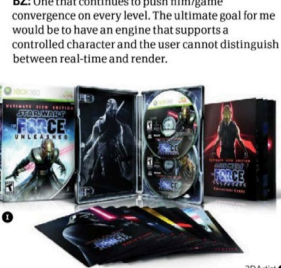
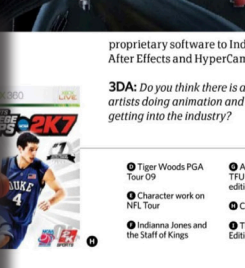
BZ: You are who your team is. Lucasfilm, as a company, is a natural fit for me. We both have zero tolerance when it comes to the quality of our work. We push the absolute limitation of technology in every way, shape

and form. 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, and 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?



104 • 3DArtist

1ST VENTURE: WORLDWIDE COVER FEATURE IN WORLDWIDE MAGAZINE "3D ARTIST: ISSUE 76"

the community at [www.3dartistonline.com](#)

3DArtist

Questions & answers

Our experts answer your technical quandaries for the most popular 3D programs. Simply email your questions to: [3dartist@imgmagazine-publishing.co.uk](#)

1. Create a new rig

2. Create a new rig

3. Create a new rig

4. Create a new rig

5. Create a new rig

6. Create a new rig

7. Create a new rig

8. Create a new rig

9. Create a new rig

10. Create a new rig

ESTIMATED TIME TO COMPLETE THE TUTORIAL

20 MINS

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 as far

as I could. Jango Fett and General Grievous were 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.

• DID YOU KNOW? • All tutorial files can be downloaded from: [filesilo.co.uk/3dartist-76](#)

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