Casey Dame

Digital Humans Developer – Technical Animation, Character Rigging, Tools

Feature Film | *Television* | *Commercials* (*IMDB Profile*) Los Angeles, CA | U.S. Navy Veteran | <u>CaseyDametd@gmail.com</u> Linkedin Profile | <u>Portfolio</u>

PROFESSIONAL SUMMARY

Creative VFX and CG professional with 15+ years expertise in character and face rigging, technical animation, digital humans and simulation across blockbuster franchises like *Star Wars, Star Trek, Game of Thrones, DC Universe* and *Frozen*. Specializes in creating photorealistic faces and digital doubles from volumetric capture, performance capture enhancements, and Python scripting for innovative tools. Proven ability to lead teams, optimize workflows, and develop custom solutions that streamline production. Expert character rigging of faces, bipeds, and quadrupeds, environmental simulations, and CFX for cloth/hair/muscle/flesh and skin sliding. On-set and virtual production experience. Delivering exceptional visual effects.

PROFESSIONAL EXPERIENCE

Scanline VFX / Eyeline Studios - Powered by Netflix Lead Technical Character Developer - Digital Humans - Volumetric Capture +

(Beverly Hills Cop: Axel F, Creation of the Gods II, +4 titles currently in production)

Lead Innovation and Development

- Develop new Python-based production tools for artists, demo and consult for cross-departmental teams
- Led development of automated production workflow, reduced a 7-day manual process to just 1 day through cross-departmental collaboration streamlining efficiency
- Create photorealistic faces and digital doubles from volumetric capture for performance capture enhancements
- Train machine learning facial detection software using reinforcement learning, achieving photorealistic face performance reconstruction that integrates with real-world environments for optimal quality
- Optimize facial rigging systems by enhancing FACS (Facial Action Coding System) blend shapes and procedural techniques, improving both technical animation and production speed and effectiveness

Cross-departmental Collaboration

- Design pipeline to integrate animation tools into production, leading to adoption across teams
- Manage and deliver multiple R&D initiatives, ensuring efficient collaboration across departments and timely delivery

Lead Technical Animator - Digital Humans - Volumetric Capture

(Aquaman 2, The Flash, Black Adam, The Gray Man, The Batman) Leadership

- Led a team of 18+ Technical Animators, overseeing the delivery of over 100 shots for Aquaman 2, ensuring quality standards
- Provided mentorship to junior artists, fostering skill development in both technical and aesthetic practices
- Played central role in troubleshooting and resolving complex shots, consistently meeting tight production deadlines
- Oversaw direction to provide the highest level of animation for all assets, maintaining consistent standards across all productions
- Delivered final shot reviews, ensuring seamless handoffs across departments

Innovation-Technical Development

- Developed a suite of four essential production tools, reducing production steps and human error, cutting production time per shot
- Designed intuitive artist-friendly user interfaces (UI) to enhance tool accessibility and streamline production workflows

Psyop (Freelance)

Technical Animator & Rigger

(Apex Legends Cinematic Commercials S9-S11)

- Created comprehensive technical animation of all in-shot characters focusing on hair, clothing, and accessories
- Rigged characters and performed shape correction, enhancing secondary motion and resolving interpenetration issues

Encore VFX

Sr Character Technical Director

(Doom Patrol, Batwoman, Titans, The Flash, Supergirl, Riverdale, Boss Level, Jay and Silent Bob Reboot)

- Rigged characters for a wide range of assets, including bipeds, multipeds, and creatures, as well as designing custom rigs for complex mechanical objects for high-profile TV series and films such as Doom Patrol, Batwoman, and Titans
- Built animation rig to incorporate motion capture for animators
- Developed and implemented specialized tools to streamline rigging processes
- Collaborated with animation and VFX teams to troubleshoot and resolve character-related issues, ensuring integration of rigs into live-action shots and CG environments

Los Angeles, CA 2022 - Present

Workflow and Integration

Los Angeles, CA

2021 - 2022

Los Angeles, CA 2021

Los Angeles, CA

2018 - 2020

Atomic Fiction Sr Character Technical Director/Rigging (Independent Contractor)

(Star Trek: Beyond, Rings, Daddy's Home, The Walk, Ghost in the Shell, Game of Thrones: S5)

- Led the rigging of full human body, quadruped, and invertebrate rigs for high-profile blockbuster films and premium franchises, ensuring detailed and efficient character animation setups
- Crowd simulation in Golaem

Walt Disney Animation Studios

Sr Character/Simulation Technical Director

- Created and simulated dynamic elements for *Disney's Frozen*, including hair, cloth, and fur simulations, ensuring high-quality, realistic movement in complex animated environment
- Developed and implemented rigs for magical elements, including jeweled vines, and contributed to environmental simulations for in-shot effects in the enchanted forest, while maintaining consistency with aesthetic and narrative.

MPC

Lead Character Technical Director

- Life of Pi Led team of 8 rigging artists in creation and implementation of high-resolution deformation rigs and muscle simulation rigs for 20 zoo animals, as well as managing complex simulations for ocean and typhoon sequences
- Oversaw development and maintenance of specialized tools and rigs, including a rigid-flex raft rig, 220 life jacket rigs, and boxes, while integrating Houdini hair and Maya cloth and flesh simulations to achieve realistic and environmental effects

Blue Sky Studios

Sr Character Technical Director/Technical Animation

• Developed and implemented full face and body rigs for lead characters, including humans, bipeds, and quadrupeds, on principal shots for multiple animated films, ensuring high-quality deformation and shape correction, and fixing character motion issues in productions *Ice Age: Dawn of the Dinosaurs, Horton Hears a Who, Ice Age: Continental Drift*, and *Rio.*

Industrial Light and Magic

Creature Technical Director/Technical Animation

• Rigged and developed complex character setups, including full character rigging for iconic figures like R2-D2, Yoda, and C-3PO in *Star Wars: Episode III*, along with cloth, flesh, skin, feather, and wire simulations for various creatures and battleships; created multi-layered cloth simulations for *Pirates of the Caribbean: Dead Man's Chest*, including Davy Jones' tentacles; created fur, flesh, hair, and armor simulations for over 15 characters in *Chronicles of Narnia: The Lion, The Witch, and The Wardrobe*

TECHNICAL SKILLS

- Photorealistic digital human creation, including volumetric capture face performance reconstruction and digital doubles
- Python-based scripting for tool development, debugging, workflow integration, and ML model training
- Advanced 3D mesh manipulation with synthetic data, photogrammetry, and photometric textures; FBX skeletal mesh
- Expert character rigging, technical animation, simulation (cloth, hair, muscle, skin),
- Use NumPy and SciPy to write tools with linear algebra, eigenvectors, and barycentric coordinate systems
- Visualizations, custom shaders and tools, UI design, QC digital compositing and editing; cloud rendering
- Enhancement of performance capture, deformations, rigid body dynamics, motion capture, lighting and tracking
- CG particles, fire, materials, textures, water dynamic simulations and environmental lighting; on-set VFX lighting

SOFTWARE

- Python, Maya, Houdini, MEL, PyTorch, OpenCV, UE5, Marvelous Designer, Nuke, Shotgrid, PyCharm, Domino, Shake
- FACS, Disney XGen, Wrap4D, RenderMan, DeepFaceLab, Mental Ray, GitHub, Golaem, Proprietary shaders
- Jira, Confluence, CUDA, draw.io, JSON, 3D Math

EDUCATION

- University of Notre Dame Bachelor of Arts, Studio Arts, Painting and Sculpture
- The School of Communication Arts Computer Art and Animation
- Encore VFX: Anatomy with Andrew Cawrse; Digital Domain: Acting for Animators

MEMBERSHIP

Visual Effects Society

San Francisco, CA

2003 - 2006

Oakland, CA 2014 - 2018

Vancouver, BC

2011 - 2012

Greenwich, CT

2006 - 2010

2013 - 2014 ng high-quality

Burbank, CA