

JOSEPH BRANDENBURG ▯ TECHNICAL ARTIST

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📍 Orlando, FL

🌐 portfolio.nodespaghetti.club

PROFESSIONAL SUMMARY

Technical Artist and rigging systems developer focused on procedural rigging, production tooling, and real-time animation workflows. Built studio-scale pipelines as Lead Artist at Grow Goodness and developed Mantis Rigging Nodes, a declarative node-based rigging framework for scalable, reusable rig systems. Advanced experience in Maya, Unreal Engine, Blender, and Python-based tool development for animation and rigging pipelines.

WORK AND PROJECT EXPERIENCE

Everent (2026) • Studio Kismet

FIEA capstone

- Developed a modular Python auto-rigging system in Maya for humanoid and creature workflows, designed for real-time production, motion capture integration, and Unreal Engine compatibility.
- Built procedural rigging systems using curve-driven and matrix-based techniques, enabling stable deformation, scalable rig reuse, and animator-friendly controls.
- Created a rapid facial rigging approach using joint-based action blending and matrix composition, supporting efficient deformation layering within production rigs.
- Implemented and validated rigs in Unreal Engine using Perforce-based pipelines, ensuring correct deformation behavior and real-time asset compatibility.

Mantis Rigging Nodes (2022-2026) • Nodespaghetti

Free and Open-Source Node-based Auto-rigging Framework

- Developed Mantis Rigging Nodes, an open-source declarative rigging framework that enables technical artists to design reusable, composable rigging systems using a node-based architecture, with a production-ready implementation for Blender.
- Engineered a high-performance Python graph-evaluation and rig-generation system with dynamic dependency resolution, nested execution models, and profiling infrastructure, capable of processing thousands of interconnected nodes with interactive performance.
- Presented "Rigging With Nodes Changes Everything!" at Blender Conference 2025, introducing a new paradigm for scalable rig development to a live audience and 15,000+ online viewers.
- Built and supported an active community of 100+ users through documentation, direct support, and 10+ technical training videos demonstrating production workflows and real-world rigging applications.

Treehive Photogrammetry (2023-2026)

3D Scan Asset Webstore

- Captured high-resolution photogrammetry data with calibrated photography workflow (controlled exposure, color management, real-world scale preservation).
- Created production-ready 8K materials and scan-derived assets through mesh processing, retopology, baking, PBR extraction, and seamless tiling workflows.
- Delivered optimized textures using physically based rendering standards, 16-bit linear data workflows, packed ORM textures, and engine-ready asset packaging.

Lead Artist (08/2020 - 12/2023) • Grow Goodness

Children's Books and Animations Startup

- Established the studio's 3D art pipeline from the ground up, introducing production planning, review workflows, asset management practices, and automated project-generation systems that transformed an ad hoc process into a scalable content pipeline while helping define production standards and communication processes.
- Developed production-critical Python and BASH automation for rigging, scene generation, rendering, compositing, batch processing, asset management, and video editing, reducing project turnaround times by 40–75% while eliminating common sources of human error.
- Engineered highly flexible facial, eye, and deformation rigging systems capable of supporting expressive cartoon performances across 20+ unique characters with diverse topologies and proportions over multiple years of production with minimal redesign.
- Served as the primary Technical Artist, Character Artist, Animator, and Pipeline Developer, producing and delivering all artwork, assets, animation, rigging, shaders, materials, and final content for 7 books, 10 animated productions, and 10 educational videos.

Stick To Manual (08/2019 - 05/2020)

UCF Character Animation Capstone

- Built a Python-based procedural rigging system in Maya for book-style props driven by a network of curves, enabling high-quality squash-and-stretch deformation and clean, stable topology behavior across numerous production assets.
- Modeled and UV-mapped multiple production assets, including a fully authored character with supporting blendShapes and deformation-ready topology.
- Contributed to an award-winning animated short recognized with Best Animation and Best Director honors at FilmCon 2020.

EDUCATION

Bachelor of Fine Art, University of Central Florida, 2020

Emerging Media: Character Animation

Master of Science, University of Central Florida, Florida Interactive Technical Academy, 2026

Game Development: Technical Art

SOFTWARE

Unreal Engine 5

Autodesk Maya

Blender

Unity

Houdini

Adobe Creative
Cloud

Substance
Designer

Perforce



LANGUAGES

English (Native)

Spanish (Conversational)

Polish (Conversational)

References Available Upon Request