

TECHNICAL SKILLS

- Python / C++ / MEL / PySide / JavaScript / HTML
- Linux / Unix / Bash / Git / Shotgun
- Maya / Nuke / Houdini / Katana / Deadline / Substance / Adobe Suite
- Maya, Nuke, Houdini Scripting and Tool Development
- Arnold / Renderman / Mantra
- Unreal Engine 4 / Unity / Augmented Reality / Virtual Reality / Perforce
- Able to easily learn proprietary software and pipelines

EDUCATION

December 2009 Bachelor of Science in Computer Science, Texas A&M University

December 2013 Master of Fine Arts in Visualization, Texas A&M University

WORK EXPERIENCE

January 2018 - July 2018

Technical Director, Duncan Studio

- Projects: *Mary Poppins Returns* (2018)
- Tool development for Maya, Nuke, RV, Shotgun, and other packages using Python / PySide to extend and optimize the production pipeline
- Worked with artists and CG supervisors to improve workflows and delivery/packaging of shots for ingestion by other third-party vendors
- Integrated Maya and Nuke with Deadline and Shotgun to run automated processes on shots
- Streamlined batch Alembic caching from Maya for animation
- Developed scripts for shader conversion between different render engines
- Implemented Bash scripts for more efficient pipeline navigation
- Helped maintain and extend existing tools and pipeline features
- Debugged and fixed any software or rendering issues that would arise
- Produced scripts upon show completion to archive and clean-up data
- Programmed and created an augmented reality application in Unity for Android / ios

November 2017 - December 2017

Software Developer / Contractor, CBS Digital

- Brought on for a project to develop software that transferred real-world camera lens data to Unreal Engine for real-time green screen compositing

May 2014 - January 2017

Associate Lighting Technical Assistant, DreamWorks Animation

- Projects: *Kung Fu Panda 3* (2016), *Trolls* (2016)
- Technical support for the lighting team, assisting with debugging technical issues related to rendering and lighting tools
- Optimized shots to speed up rendering or be more memory efficient when necessary
- Wrote scripts for more efficient workflow
- Tested new tools, software, and created documentation
- Installed lighting rigs and set up shots for lead lighters
- Set up sequence mattes and DI mattes for compositing work
- Rendered lighting shots and composited for feature animation

RELATED EXPERIENCE

Scripted Studio-Style Lighting Rig in Houdini

- Auto-generates a 3-point character rig or environment lighting rig based on user selection
- Sets up render layers with hold outs, AOVs, light-linking, smart bundle lists, custom node parameters, and rig controls
- Follows naming conventions based on the name of the selected assets

Custom Ray Tracer

- Wrote a ray tracer in OpenGL / C++ featuring image based lighting, occlusion, color bleeding, caustics, reflections, refractions, and texture mapping with options to render primitives or import OBJ meshes