

## EDUCATION

**Santa Clara University, B.S. Computer Science and Engineering** CGPA 3.5 *September 2014 - June 2018*  
SCU ACM SIGGRAPH President and Founder  
Courses: Computer Graphics Systems, 3D Animation/Modeling, Software Engineering, Distributed Computing  
STEM National Science Foundation Scholarship

## EXPERTISE

Tools Development, Production Pipelines, Computer Graphics Systems, 3D Rendering and Modeling, Distr. Computing

<i>Languages</i>	Python, C++, C, JavaScript, HTML, CSS
<i>Workflows / Platforms</i>	Linux, Docker, Perforce, Git + (Github/Gitlab), JIRA, SCRUM, Agile
<i>APIs / Frameworks</i>	Qt/PyQt, Django, Google Cloud Platform, AngularJS, jQuery, Node.js
<i>Computer Graphics</i>	Maya, Nuke, Houdini, Katana, OpenGL
<i>Databases</i>	MySQL, PostgreSQL, Google Datastore

## EXPERIENCE

**Industrial Light and Magic (ILM) - Pipeline Engineer, Intern** *June 2017 - September 2017*

- As part of the global Pipeline Engineering department, built tools and created software for ILM's in-house render farm system, asset management infrastructure, media creation pipeline, and data transfer services.
- Worked closely with Walt Disney Animation Studios in implementation of *Coda* and *Dpix* software for render queuing and media/review libraries respectively; spearheaded rearchitecture of ILM's core media player.
- Created core API service for global studio data transfer and remote VFX Supervisor platforms; worked with Pipe TDs to apply a new artist facing pipeline for Motion Capture work flows.

**Disney Interactive - Software Engineer, Intern** *June 2016 - September 2016*

- Within the Media Technology Engineering Team, created administrative tools for digital asset management, including video/image media + file metadata (Metrics, statistical analysis, database management)
- Improved scalability of the asset manager through design of database helper functions
- Designed and implemented digital pipeline software to manage reindex and asset mapping for CMS, Core, and production pipelines

**COEN 165, 3D Animation and Modeling - Teaching Assistant** *September 2016 - Present*

- Taught Computer Graphics fundamentals and 3D Modeling/Animation pipeline including Maya and introductory technical direction. Built tools to automate simple rigs for students.

**Hoana Medical - Software Engineer, Intern** *June 2015 - August 2015*

- Engineered tool to analyze wireless data packages from sensory data and to detect anomalies
- Achieved 99% message integrity through checksum tool implementation
- Built medical monitoring mobile and web application that improved load times by 25% compared to the previous implementations with additional live-updating graphs

## PROJECTS

**Disney Matterhorn Digital Asset Manager** *Summer 2016*

- Image, video, and file manager for digital assets. Built multiple administrative tools and interfaces for: video transcoding, metrics and diagnostics, meta data tracking, legacy tracking, data index, helper tools, and
- Python, Flask, Google App Engine, Google Cloud Storage, Datastore API

**Lattice Constructs for Art-Directed Motion Paths in Volumetric Simulations** *In Development*

- This method creates a lossy optimizer to reduce calculation complexity for simple motion paths by building a cubic lattice in a 3D space.
- Maya, C++

**A Better Maya Turntable Plugin** *In Development*

- A plugin for Maya which will automatically place models into a turntable with customizable features and parameters. Provides automatic lightning for dramatic showcasing.
- Maya, Python