# **BRYSON LEE**

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# **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

Languages Python, C++, C, JavaScript, HTML, CSS

Workflows / Platforms Linux, Docker, Perforce, Git + (Github/Gitlab), JIRA, SCRUM, Agile APIs / Frameworks Qt/PyQt, Django, Google Cloud Platform, AngularJS, jQuery, Node.js

Computer Graphics Maya, Nuke, Houdini, Katana, OpenGL Databases MySQL, PostgreSQL, Google Datastore

# **EXPERIENCE**

#### Industrial Light and Magic / Lucasfilm - Pipeline Engineer, Intern

June 2017 - September 2017

- As part of the global Pipeline Engineering team, 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 reachitecture 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

#### SCU Imaginarium Center for CG Research - Lab Assistant

September 2016 - Present

#### 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

#### 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

# **Simple Lattice Constructs for 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 new turn table plugin for Maya which will automatically place digital models into a turntable with customizable features and parameters. Features automatic lightning for dramatic showcasing.
- Maya, Python