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
STEM National Science Foundation Scholar
Courses: Computer Graphics Systems, 3D Animation/Modeling, Software Engineering, Distributed Computing

EXPERTISE

Tools Development, Production Pipelines, Computer Graphics Systems, Artist Workflows, Studio Technology
Languages   Python, C++, C, JavaScript, HTML, CSS, SQL
Workflows / Platforms   Linux (RHEL7 + Centos), Perforce, Git + (Github/Gitlab), JIRA
APIs / Frameworks   PyQt/Qt, Django, Docker, Ansible, Google App Engine, AngularJS, Flask, Node.js
CG / Studio Tools   RV, Maya, Houdini, OpenGL
Databases   PostgreSQL, MySQL, OracleSQL, Google Datastore

EXPERIENCE

Industrial Light and Magic (ILM / Lucasfilm) - 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
- Created core API service for automated global studio data transfer and remote VFX Supervisor platforms
- Led rearchitecture of ILM's core media player (*RV*); alongside Pipe TDs, created new plugin framework

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 and art production pipelines

Santa Clara University, 3D Animation and Modeling - Teaching Assistant   *September 2016 - Present*
- Taught Computer Graphics fundamentals and the 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

Distributed Creative Content Collaboration Platform (Senior Thesis)   *In Development*
- A cloud-based suite of software that will enable small to medium sized teams to bring their creative ideas into reality by providing a comprehensive, yet modular set of tools to support a modern creative content pipeline
- Python (Server Scripting, Core API), PyQt, Web-based technologies (Django, Flask)

Procedural Modeling Tools for Surrealist Art Style (Houdini, C++)   *In Development*

Disney *Matterhorn* Digital Asset Manager   *Summer 2016*
- Web-based Image, video, and file manager for digital art assets. Built multiple administrative tools and interfaces for: video transcoding, metrics, diagnostics, meta data/legacy tracking, and indexing helper tools
- Python, Flask, Google App Engine, Google Cloud Storage, Datastore API

Cubic Lattice Constructs for Better Volumetric Pre-Visualizations   *In Development*
- This method creates a lossy optimization for volumetric simulations by building a cubic lattice in a 3D space, and providing a better pre-visualization.
- C++