Bryson Lee

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Education

University of Southern California, M.S. Computer Science (Creative Technology/CG) *August 2018 - Current*

Santa Clara University, B.S. Computer Science and Engineering *September 2014 - June 2018*

- Emphasis in Software Engineering, Computer Graphics Systems, 3D Animation/Modeling, Distributed Computing
- STEM National Science Foundation Scholar
- SCU ACM SIGGRAPH President and Founder

Expertise

Tools Development, Production Pipelines, Computer Graphics Systems, Artist Workflows, Studio Technology

- **Languages**: Python, C++, C, JavaScript, HTML, CSS, SQL
- **CG / Studio Tools**: Maya, RV, Houdini, Redshift, OpenGL
- **API / Frameworks**: PyQt/Qt, Django, Docker, AngularJS, Flask
- **Environments**: Linux, Windows, OSX, Git, Perforce

Experience

Blizzard Entertainment (Animation, Cinematics) - Research and Development, Intern *June 2018 - Present*

- Developing pipelines to manage renders and pre-baked layout scripts for imported models, props, assets, and sequences from Maya, Houdini, and Nuke
- Improving capabilities of CG workflow tools dependent on asset element hierarchy, especially for tools used in animation, modeling, texturing, and layout reliant on robust element mappings

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

- Engineered tools and created new software for ILM's in-house render farm system, asset management infrastructure, media creation pipeline, and data transfer services
- Collaborated with Walt Disney Animation Studios in implementation of *Coda* and *Dpix* software for render queuing and media/review libraries, respectively
- Developed core API service for automated global studio data transfer and to support remote VFX Supervisor platforms
- Led rearchitecture of ILM's core media player, *RV*; alongside Pipeline TDs, created new plugin framework

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

- Within the Media Technology Engineering Team, created production tools to manage digital art assets, including video and image media, metadata, and transcoding (including metrics, statistical analysis, database management)
- Improved scalability of the asset manager through design and implementation of database helper functions
- Developed software to manage reindex and asset mapping for in-house art production pipeline and CMS

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

Projects

***Pipeworks*: Cloud-based CG Pipeline for Distributed and Remote Collaboration** *January 2018 - Present*

Awarded for Best Project of Senior Design Session, May 2018

Provides teams a cloud-based platform to manage CG art assets, shots, sequences, and scenes to streamline production. Includes a cloud API, SDK, desktop-based SaaS, and new design language.

- Python, PyQt5, Qt5, Flask, Google Cloud Endpoints, Google Cloud Storage, Google App Engine

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

***vcontrol*: A Lightweight Version Control System for Digital Art Assets and Binary Data** *January-March 2018*

Lightweight CLI VCS that is based on a simplified directory-oriented platform to allow artists to stage local versions of art assets before committing them for review in an existing pipeline. Supports common VCS commands including committing, reverting, branching, fetching, ect. for distributed version control and remote workflow support. Works with CG software project folders.

- Python

**learn more about my work and projects at www.brysonlee.com*