OBJECTIVE

An internship opportunity with a growing startup. My goal is to leverage my existing technical knowledge and to learn new technologies from my colleagues. I have a niche interest in audio based projects, and continue to form experiments about music analysis and visualizations.

EDUCATION & CERTIFICATIONS

Sophomore at Foothill College, Los Altos, CA

Current

- CS major working with Python, Javascript and C++ (3.4 GPA)
- Working to transfer to a 4-year University of California

Unity3D Certification Fall 2016

Make School and UploadVR summer academy

Summer 2016

• Was taught Unity3D and C# with VR focus from instructors in a makerspace

High School Diploma

2013

AP Computer Science coursework – Java programming

SKILLS & ABILITIES

- Ember.js & Node.js
- Python
- C++
- Use of Git / Github
- C# and Unity3D
- SteamVR, HTC Vive, Oculus Rift

JOB EXPERIENCE

Javascript Intern for Gliffy

May - September 2017

Gliffy is an online diagramming web-app used to make flowcharts and schematics

Worked on Gliffy Project, a tool for visualizing software development sprints

Helped build the web app from prototype to closed beta production using modern Javascript frameworks like Ember.js, Node.js w/Express.

- Took on both frontend and backend tasks and worked with all members of a small team of engineers to integrate my site features
- Involved heavily in the agile management process: SCRUM, code review & continuous integration. We use JIRA, Github, and Travis.ci respectively.
- Was offered a full time permanent position immediately following internship

Unity / C# developer for VR Worldwide

Winter 2016

VR Worldwide provides consultancy to companies wanting to build their virtual presence.

Worked on a VR Portal - a Virtual Reality showroom app for CES

- Helped program an experience launcher and preview player for several different HTC Vive applications
- Built an interactive tutorial to teach basic VR controls and actions
- Built analytics data aggregator to track user flow through the launcher, tutorial, and 3rd party applications.

Unity / C# developer for ModeTwo

Summer 2016

FitVR: Using Virtual Reality to deliver wellness that goes beyond health | Press Article

 Designed and programmed a variety of VR focused health applications for HTC Vive and Oculus Rift

Notable Projects

Oolong - Frequency Density Analysis for Music (Python)

Current

This is an experiment in music analysis where the goal is to create density models of the types of frequencies played in various music genres.

- Three stage analysis process for analyzing, training, and classifying songs
- Leverages several Python numpy-based libraries like Librosa, Scikit-learn, and Scikit-image

Audio Crawler - Genre prediction with Machine Learning (Python)

April 2017

LA Hacks 2017 Submission

 Designed and developed a system to feed a song's spectrograph data into a neural network for analysis. Neural network would then predict the song's genre based on previous training data

Steam Game - Bubble Labs (C# and Unity3D)

November 2016

Bubble Labs is a physics interaction sandbox enabling users to explore liquid physics in a zero gravity environment Reviews | Press

- An intuitive VR game featuring a sandbox fluid dynamics simulation
- Developed MVP in 4 weeks and deployed to <u>Steam</u> with over \$5000 gross
- Showcased application to over 150 attendees of two digital art focused events

Projection Map Visuals (C# and Unity3D)

December 2016

Created computer generated visuals in sync with the DJ's music to immerse event goers with an audio reactive visual experience.

- Developed visuals using Unity3D, C#, and ShaderLab
- Uses a MIDI controller with knobs to tweak graphics properties and effects while the DJ plays their music.

Website Development

2013 - 2014

Founded a web development contracting service while in high school to design and develop websites for small businesses including a global marketing company, a children's theatre studio, a wedding photography portfolio, and a real estate agent's showcase.

- Created and maintained Apache/Debian server for all clients
- Websites developed using HTML, CSS, PHP, mySql and Wordpress when requested

School Activities

Foothill College CS Club - C# and python instructor

Current

- Organized and ran hackathons for Foothill college students as a fundraiser.
- Coded a series of <u>Unity tutorials</u> to teach fellow clubmates the basics of game design and Object Oriented Programming
- Co-created a Python 3 tutorial series geared towards beginners wanting to get their feet wet in computer science