# **Alexx Mitchell**

# Software Engineer

Skilled Software Engineer with 2.5 years of software development experience involving both QA and Programming. Solid experience with bug tracking, writing reports, writing scripts to alter software instrument behavior, and test software plugins and hardware devices. Adept in using version control and adhering to OOP principles and design patterns, as well as writing audio software for signal processing, analyses and automation in C++ and Python.

**EXPERIENCE** 

April 2019 – Dec 2019

# **Automation Engineer**

Universal Audio, Scotts Valley, CA

- Wrote and tracked bugs and issues, referenced and updated documentation.
- Created, executed and maintained automated test scripts for Apollo x4 and Apollo Twin X devices.
- Optimized UAD2 test codebase by as much as 34%.
- Designed schematics to document signal flow of various audio interfaces and physically routed them accordingly.
- Communicated across product management, engineering and QA teams to address priorities per release and discussed needs for new automation tests.
- Used version control and participated in code reviews as a member of a Scrum Team.
- Accumulated experience with Continuous Integration using Bamboo
- Accumulated experience with plugin regression testing, front end testing and integration testing on MacOS and Windows systems.
- Used Python and Pytest automation framework to write, debug and troubleshoot test scripts.
- Utilized foundation of real-time audio principles sample rates, buffering, drivers, digital and analog i/o types, to test integration of various software and hardware configs.

January 2018 – March 2019

# **Audio Application Developer**

Independent, Boston, MA

- Designed virtual software instruments and audio units for audio production tools, Implemented graphics and UI.
- Designed and developed audio applications in C++ and Csound to make <u>Audio Effects</u> and Synthesizers including reverb, distortion and samplers.
- Implemented signal processing algorithms for plugin features, including buffer memory, envelopes, LFO, <u>IIR</u> filters, reverb and delay parameters.
- Created custom installer packages to integrate VST/AU plugins into Mac and PC systems.
- Launched an online platform to distribute software programs for commercial use.

140 E Santa Clara ST #9 San Jose, CA 95113 (210) 251-1477 kamilahamitchell@gmail.com

### **SKILLS**

### Software:

JUCE, Xcode, Cabbage, Eclipse, Jira, Pycharm

### Languages:

C, C++, Python, Csound, JavaScript, Max, Bash, Git

#### General:

MS Office, iWork, Data Visualization, Audio Editing, Signal Processing, Synthesis, Sound Design

## **Operating Systems:**

Windows, MacOS

# **Alexx Mitchell**

# Software Engineer

May 2018 – November 2018

# Software Developer Fellow

**NeuroLex Laboratories**, Remote

- Designed and implemented <u>software demo</u> in Python to calculate and compare formant frequencies of voice samples of PTSD, anxiety and depression patients to determine shared and unique traits.
- Performed research and audio analyses on various voice samples using knowledge of signal processing, speech and algorithms.
- Programmed algorithms to sort resulting data into plot, visualized data results using Matplotlib.
- Communicated with mentor and team members regarding the team's project goals.
- Won second place in the Demo Day contest amongst Neurolex fellows, by presenting demo and results to an executive panel.

June 2016 – August 2016

# Content Design Intern

Apple, Cupertino, CA

- Planned, designed and applied self-directed project plan through to completion to create virtual sampled instruments
- Sound design for Music Apps content through recording, synthesis and multi-sampling
- Edited, de-noised, and added dynamic and time-based processing to sampled sounds.
- Used JavaScript to build midi scripts for sampled instruments.
- Wrote reports for bugs encountered while executing project tasks in Logic Pro X, using Apple internal bug tracking systems.

**EDUCATION** 

August 2018

# Electronic Production & Design

Berklee College of Music, Boston MA (Major GPA: 3.4)

## **Relevant Coursework**:

Audio Programming in C, Audio Technology I & II, cSound: Sound Design & Composition, Audio Programming for the iPad, and DSP for Post-Production.

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