# Steven Murr

# <. Title>

<.Address> <. CityStateZip> <.Phone> ⋈ <.Email> <. Github>

#### Skills

Python, Go, NodeJS, Bash Langauges **Proficient:** 

Familiar with: Swift, Java, C

Frameworks React, Angular, SciKit Learn

Tools/Libraries Git, Travis CI, GNU Make, Bootstrap, jQuery

Devices Raspberry PI, Banana PI, ESP8266, Arduino

### Experience

#### Feb 2016 Software Engineer / Cortana, Microsoft.

- Present Python, Go, React, Docker, MongoDB, BoltDB, Postgres

- Worked closely with third parties to develop and deploy custom speech platform software, build custom TTS voice fonts and explore new use cases for Speaker Recognition, Audio Segmentation and Spectral Repair.
- Developed web portal that aggregates audio, Excel Files and font building data to allow users to better understand training data used to develop TTS fonts.
- Developed a web tool for studio vendors to ensure spectral consistency and allow feedback on specific features such as F0, RMS and speaking rate.
- o Prototyped a technique to combine multiple domain specific voice fonts to improve Cortana VQ in a specific domain.
- o Prototyped a plugin framework to allow quick modification of audio plugins on ALSA sinks for use in embedded devices.
- Extended existing VX work to improve user understanding of long lists.
- Deployed tools on Window, Linux and Mac using Docker.

#### Jul 2010 Audio Engineer, Self-Employed.

- Feb 2016 Kontakt Scripting, C++, JUCE, duktape

- o Produced music for Grammy award-winning mainstream and Latin recording artists including Smash Mouth, Los Tigres Del Norte, Suenatron, Gin Blossoms, and El Chapo De Sineloa.
- Scripted in-house sample libraries in Kontakt.
- Reverse engineered Logic's Scripter plugin using C++ and embedded JavaScript interpreter duktape.

#### Apr 2008 QA Engineer, Namco Networks.

- Jul 2010 Java

- o Built and tested mobile games, fixing minor issues such as resolution device targeting, localization, and
- Received top department awards for achieving highest pass rate and consistently reporting high severity
- Memorized multiple carrier and internal standards, authored test plans, and became adept with Sea Pines? Test Tracker Pro.
- Worked in close liaison with programmers and producers, acting as the bridge between engineering, QA, and production.

## Education

Ongoing Bachelor of Science, West Valley and Mission Community College.

Computer Science 60% Complete

Ongoing **Self-Directed Learning**, *EdX Coursera*.

Attended InterSpeech 2016 Harvard's CS50 C programming course, Google's Python course, Berkeley's CS 162 Operating Systems course, and Stanford's Programming Paradigms course.

#### Extracurricular

#### Oct 2016 Open Source Innovation Lab, Glider Labs.

- Present Go
  - Collective of hackers looking to make the world more programmable.
  - Contributed to the development of Go programming educational materials.
  - Prototyped IoT sensor-based devices.
  - o http://gliderlabs.com

#### Jun 2017 Alsa Plugin Framework, Personal Project.

- Present ALSA, Python, Bash
  - Developed to simplify usage of LADSPA audio plugins in ALSA.
  - o https://github.com/stevemurr/alsa-plugin-framework

#### Apr 2017 **Agriculture Automation**, *Oxylus*.

- Present Go, BoltDB
  - Developed an event system that works with off-the-shelf IoT devices.
  - o https://github.com/stevemurr/oxylus-events

### Jun 2017 Secure Router, Personal Project.

- Present BPI-R1, Go, OpenVPN
  - Devloping router targeted at consumers which provides DNS level ad blocking and personal VPN.
  - Currently working on automating VPN setup.

#### Jul 2014 Internet Radio Monitoring Service, Wav Charts.

- Aug 2014 Python, MySQL
  - Built an online radio monitoring platform using audio fingerprinting to track song plays.
  - Deployed on Google App Engine.

#### Jul 2015 Raspberry PI Based Lecture Recording, Lecture Keeper.

- Aug 2015 Python, MySQL
  - Created a lecture-recording device using a Raspberry Pi that automates the video capture, audio recording, and file upload to the cloud. Designed as a cost effective solution for students to easily access and archive
  - A demo of it in action is available on YouTube at https://youtu.be/6QNrnzQUXQO

#### Oct 2015 Raspberry PI Based Entertainment Device, Apple TV Clone.

- Oct 2015 Python, Swift
  - o Created an Apple TV clone using a Raspberry Pi controlled by an iPhone app that allowed users to find content via torrents.
  - A demo of it in action is available on YouTube at: https://www.youtube.com/watch?v=wH6H2oUoijM