# **Aaron Evans**

aaronrevans.com aaron@cs.utexas.edu

Incoming SWE Intern at Audible

#### Education

3.95 GPA, The University of Texas at Austin Bachelor of Science in Computer Science, expected 2019.

## Experience

## Web App / Embedded Developer

September 2016 - Present

UT Department of Utilities and Energy Management

- » Created all front-end and server code for the web application, network communication.
- » Reverse-engineered serial communication protocol between elevator controller and microcontroller. JavaScript (node.js, Express), PostgreSQL, MongoDB, React, Raspbian Linux, Python.

#### Bioinformatics Research Assistant

February 2016 - September 2016

UT Center for Computational Biology and Bioinformatics

- » Applied machine learning, statistics, and principle components analysis to identify promoter sequences of genes of neurons in mouse brains.
- » Conducted data wrangling, finding useful links between otherwise separate data sets.

Python (numpy / scipy / scikit-learn / pandas), R, BASH, Stampede Supercomputer (CentOS), vim.

## **Projects**

### Mural Painting Robot "Robotticelli"

September 2015 - Present

- » Served as project manager and lead developer of hardware and software teams.
- » Developed algorithms for color quantization, data filtering, and sensor integration.
- » Programmed digital IO and controller code for motors, servos, and communication on Raspberry Pi.
- » Will be displayed at South by Southwest (SXSW) 2017.

Python (Flask / Celery / pigpio / scikit-learn / numpy / scipy), C++, Raspbian Linux, vim.

#### Simple 3D Rendering Engine

May 2015 - June 2015

- » Created primitive rendering engine, included camera manipulation and basic z-indexing.
- » Handled translation and rotations of arbitrarily-shaped objects, represented by graphs, by storing states as quaternions.
- » Programmed in Java and rendered as a self-contained applet using the Java awt package. Java (java.awt).

#### A Smarter Course Scheduler

October 2016 - Present

- » Creating web application to improve UT's course scheduler by factoring in degree completion, courses taken, and class-time blocks to facilitate class searching and schedule building.
- » Started as a hackathon project, but has continued in conjunction with the U of Texas IT services. JavaScript (node.js, Express), React, Elasticsearch, Python.

# **Technologies**

Experienced with Bash shell, Unix-like operating systems, Python, Lua, and Javascript. Comfortable with Node.js, Flask, React, MongoDB, Java, C, HTML, CSS/SCSS, Arduino/RPI, and git. Prior experience with PostgreSQL, AngularJS, R, Julia, lisp.