

Permanent: 23111 San Salvador Pl., Katy TX 77494 Local: 806 W. 24th St., Austin TX 78705

#### Education

#### **University of Texas at Austin**

B.S. IN ELECTRICAL AND COMPUTER ENGINEERING

Aug. 2015 - May 2019

- GPA: 3.93
- Focus in Software Engineering and Computer Architecture

## **Experience**

## **Backend Web Developer**

KVRX 91.7 FM RADIO STATION

Jul. 2017 - PRESENT

- Developed backend using **Django** to facilitate user interaction with database
- Implemented mockup front-end design using **Bootstrap** for mobile-friendly viewing
- Designed models with new functionality while staying backwards-compatible with existing database

#### Researcher for Automatic Error Detection in 3D Printing

COMPUTATIONAL DESIGN LAB (DR. CEM TUTUM)

Jun. 2017 - PRESENT

- Wrote Bash and OpenSCAD scripts to generate 2D projections of 3D model to collect ideal image dataset
- Implemented timelapse photography of 3D printed object using **Raspberry Pi** to collect actual image dataset
- Designed 3D models prone to warping in order to study possible errors

### **Teaching Assistant**

E E 312: SOFTWARE DESIGN & IMPLEMENTATION I

Aug. 2017 - PRESENT

- Taught C, C++, and Linux in discussion sections to supplement lectures
- Held weekly office hours to help students understand class material
- Graded student code and provided feedback on correctness and style to promote improvement

# **Projects**

#### **Arch Linux Customization**

PERSONAL PROJECT

Aug. 2016 - PRESENT

- github.com/Swaift/dotfiles
- github.com/Swaift/wsl-startup
- Wrote AutoHotKey scripts to help start up Windows Subsystem for Linux and X server
- Configured Vim and Zsh to integrate with tiling window manager for ease of use and aesthetics
- Set up **PulseAudio** server to pipe audio from Linux to Windows

#### **Pong Clone**

Personal Project Mar. 2017

- github.com/Swaift/pong
- Implemented state machine in C++ to efficiently transfer data between game screens
- Rendered graphics using **Simple Fast Multimedia Library** for smooth animation
- Designed algorithm for AI paddle movement to allow challenging and addictive gameplay

#### Skills\_

**Programming** Java, C, C++, Python

Web Django, jQuery, Bootstrap
Tools Vim, Git, Linux, LaTeX