# ANDREW TSENG

andydomokun@gmail.com 832-520-0969

#### **EDUCATION**

#### University of Texas at Austin

Bachelor of Science in Computer Science, GPA: 3.2

#### WORK EXPERIENCE

#### Kershner Trading Group - Software Engineer

February 2019 - Present

Graduation Date: December 2018

- · Improved the Locate Borrow application by removing C# dependencies within the C++/CLR application.
- · Developed server to handle orders for new clients and translates FIX 4.2 messages to an internal message.
- · Developed test client to test fix server that takes in FIX 4.2 messages to pipeline in to order handling system.
- · Ported code from windows to Linux to fit new feed servers/hardware lead to improve latency in handling orders.
- · Built internal tools to monitor system of order management system and found 21 inter-application bugs.
- · Designed and developed backend feature of recycling shares within trader accounts for to use throughout trading day.

### Vast.com - Software Engineer Intern

Summer, 2017

- · Worked with a team of 5 other interns in developing a side product for Vast.com
- · Utilized Vast.com's Carstory data to make a webpage to list out car information for a used car pop-up.
- · Worked with other UX designers in designing posters/online ads to promote the car pop-up product.

# Compal Electronics - Software Engineer Intern

Summer, 2016

- · Rewrote developer admin database pages into templates and added management features.
- · Developed sanity tests to help with continuous integration to help find bugs in the in-house API.
- · Debugged and refactored MongoDB schema for new category of data in database.
- · Researched IoT concepts/protocols for R&D for potential uses on new products.

# University of Texas at Austin

Spring 2016, 2017

- $\cdot$  Led discussion sections that reviewed topics of the weekly lectures.
- · Helped grade weekly homework and developed homework and midterm/final problems.

# **PROJECTS**

#### Type Inference System in C

- · Implemented type inference features in C with the **auto** keyword.
- · Created symbol table and file rewrite in replacing auto keyword to correct type.
- · Rewrites the auto keyword to the type that it infers based on the C-program.
- $\cdot$  Wrote test scripts in Bash to make find corner cases along with string parser that finds lexes within the input program.

# Linux Kernel

- · Developed Linux kernel in C++ featuring threads, concurrency tools, virtual memory, file systems and system calls.
- $\cdot$  Designed threading system in intention to prevent deadlocking and manage re-entrant functions.
- · To avoid baggage that C++ brings, avoided using C++ STL throughout development.

# Lilypond - Facebook Messenger Bot

- $\cdot$  Facebook Messenger bot that converts textual music notes into a music sheet.
- · Utilized ImageMagick, C++, NodeJS to convert and parse text and create music sheet PNG file.

# LANGUAGES AND TOOLS

 $\textbf{Experience}: \ Python \ | \ Java \ | \ C/ \ C++ \ | \ Visual \ Studio \ | \ *nix \ | \ Git$ 

Familiar: MySQL | R | MATLAB | Verilog | LATEX | Docker | Google Cloud Platform | Javascript/React | Jenkins |

Anaconda | Microsoft SQL MS