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# Edward Seymour

#### **EDUCATION**

### The University of Texas at El Paso (UTEP)

Bachelor of Science in Computer Science, Major GPA: 3.75 Expected Graduation: May 2019 Relevant Coursework: NLP, Game Theory for Security, Reverse Engineering, OS, Networks

### Carnegie Mellon University (CMU)

Partial credit towards Bachelor of Science in Computer Science

Aug 2012–May 2015

#### SKILLS

- Experienced working with Git, C, Go, CMake, Make, Google Test, and MSP430 Assembly
- Familiar with Python, C++, unit testing, Android NDK, networking, Ruby, SQL, and Java
- Native English and Spanish speaker with basic Turkish and Japanese knowledge

#### **PROJECTS**

### Freudensong App for Android

Kotlin, C++14, Android NDK

freudensong.com

Nov 2017–Present

- Created an app that helps bad singers sing on pitch using digital signal processing techniques
- Interfaced with the Freudensong Core Library using the Android Native Development Kit

### **Freudensong Core Library**

C++14, CMake, Google Test

Jun 2017–Present

- Authored a portable digital signal processing library currently deployed on Android and iOS
- Automated smoke, unit, and integration tests on Clang and GCC on Linux and macOS

# Minesweeper on the MSP430 Microcontroller

MSP430 Assembly, C, Make

*Apr–May 2017* 

- Adapted project to limited resources—only 512B of RAM and 16KiB of flash were available
- Developed a sprite library that drew pixels 5x faster than the provided graphics library

#### **Hack Emulator**

JavaScript Apr 2016

• Achieved a 40x speed improvement over the nand2tetris.org emulator by using web workers allowing the emulator to run on a separate process without blocking the render thread

#### **EXPERIENCE**

### **Software Developer**

Freudensong LLC, Professor Led Startup, Part-Time

Jun 2017–Present

- Leading development of the Freudensong App for Android and the Freudensong Core Library
- Using Git, CMake, and Google Test in daily work for more robust and modular code

# **Undergraduate Teaching Assistant**

UTEP Computer Science Department, 10 hours per week

Aug 2017-Present

- Assisted in the Operating Systems and Computer Architecture courses, each with  $\sim$ 80 students
- Graded and helped students with labs written in Python, C and MSP430 Assembly