Maxime Sutters

CONTACT INFORMATION

LinkedIn: https://www.linkedin.com/in/maxsutters *E-mail:* msutters@cs.washington.edu
GitHub: https://github.com/maximelearning *Phone:* (206) 321-0208

EDUCATION

University of Washington, Seattle, Washington USA
Paul G. Allen School of Computer Science & Engineering

B.S., Computer Engineering, December 2021
Selected Courses: Networking, Systems, Data Structures and Parallelism, Compilers

Seattle Central College, Seattle, Washington USA

A.S., Computer Science & Engineering, June 2019

PROGRAMMING PROJECTS

GuitXR: `https://uwrealitylab.github.io/xrcapstone21sp-team4/`

- AR guitar learning application for the Magic Leap headset with floating chords and tabs, instrument-mounted controls, and real-time pitch detection
- Built in Javascript and HTML via the WebXR API and A-Frame web framework
- Refactored ML5.js-based pitch recognition library for guitar
- Presented completed VR capstone demo at the University of Washington Reality Lab

N-Car Parking Garage Simulator

- Designed and programmed finite state machine (FSM) logic in SystemVerilog for two presence sensors at the gate of a simulated parking garage and an n-bit counter to track available spots
- Simulated functionality of hardware devices - LEDs, seven-segment displays, buttons, and switches - in ModelSim before flashing to the Altera DE1_SoC FPGA board

Tetris

- Programmed Tetris clone and implemented advanced object-oriented programming (OOP) code structures in Java
- Reinforced understanding of composition, inheritance, and model-view-controller (MVC)
- Applied unit testing, version control through Git, and pair programming

TECHNICAL SKILLS

Languages: Java, C/C++, Python, Bash, HDL, SystemVerilog, Verilog, assembly
Tools: Quartus, ModelSim, GNU Debugger (GDB), Vim, Git/GitLab, IDEA, KiCad, LaTeX, Mathematica
Algorithm projects: Spam filter using machine learning (Naive Bayes), KD-tree nearest neighbor finder, content-aware image resizing with A* graph search
Operating Systems: Unix/Linux (CentOS, Ubuntu, WSL), Windows
Hardware: PCB design, 3D printing, flashing of Arduino/STM32 chips, SMD soldering

EXPERIENCE

Seattle Central College, Seattle, Washington USA

Teaching Assistant **September, 2018 - March, 2019**
Duties included office hours, technical support, and management of cloud-based messaging forum. Driver of Slack use in computer science classes at Seattle Central College.

- CSC 110 (Intro to Computer Programming) and CSC 142 (Computer Programming I)

SACNAS Chapter, Seattle Central College, Seattle, Washington USA

Chapter Secretary **May, 2019 - August, 2019**
Leading member of Society for the Advancement of Chicanos/Hispanics and Native Americans in Science. Organized meetings, researched chapter project proposals, wrote documentation, and corresponded with chapter leadership and members. Facilitated UndocuSTEM Conference.