

# Maxime Sutters

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CONTACT INFORMATION      *LinkedIn:* <https://www.linkedin.com/in/maxsutters>      *E-mail:* [msutters@cs.washington.edu](mailto:msutters@cs.washington.edu)  
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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, L<sup>A</sup>T<sub>E</sub>X, 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**  
Held office hours, provided technical support, and managed online forum for students.  
Drove Slack use in computer science, math, and physics classes at Seattle Central College.  
Classes: Intro to Computer Programming and Computer Programming I (CSC 110/142)

**Seattle Central College SACNAS Chapter**, 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.