

ERIN WOO

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📍 Burlingame, CA

EDUCATION

University of California, Santa Barbara
Computing B.S., College of Creative Studies

Santa Barbara, CA
Exp. grad: **June 2021**

- Organizations: SB Hacks V Organizing Team (Sponsorship Coordinator), Alpha Sigma Kappa – Women in Technical Studies (Webmaster/Photographer), Theta Tau – Sigma Epsilon Chapter
 - Scholarships/Fellowships: Grace Hopper 2018 UCSB CS Departmental Scholarship, Rewriting the Code Fellow
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WORK AND EXPERIENCE

Undergraduate Computer Science

Tutor – CMPSC 24 UC Santa Barbara

September 2019 - Present

- Tutor for *Problem Solving with Computers II*. Leading lab office hours and offering one-on-one assistance in programming assignments and course material in C++.

Software Engineering Intern

WeWork HQ - San Francisco, CA

June - August 2019

- **Core Platform - DeviceKit Team** – Architected RESTful APIs and middleware with Golang, Gin, and Elasticsearch for data visualization of access card usage across WeWork buildings.
- Actualized a POC device heatmapping tool in Mapbox JS that enabled product managers to visualize the utilization of WeSecure devices.

Junior Software Development

Engineer UCSB Enterprise Technology Services (Software Engineering Architecture & Lifecycle)

August 2019 - Present

- Currently developing and refining web-based UI features in Javascript.
- Assisting in migrating component libraries from Aurelia to React.

EUREKA! Scholars Research Intern

RE-Touch Lab – UCSB Media Arts & Technology

May - September 2018

- Researched and developed applications for dynamic finger-worn haptics in virtual reality systems using Unity3D/C# in Oculus Rift using Leap Motion and MaxMSP (*Tactile Echoes*).
- Quantitated the effect on haptics in virtual reality on trial participants and presented findings to colleagues and research faculty.

Undergraduate Research Assistant

UCSB Gevirtz Graduate School of Education

November 2017 - March 2018

- Co-developed the back-end infrastructure of a Scratch-based virtual reality game in Unity3D/C# for HTC Vive that teaches young children how to code (*Blockbased VR*).

Girls Who Code Summer Immersion

Program Twitter – San Francisco, CA

June - August 2016

- Introduction to programming fundamentals and data structures using Python, Javascript, and C++.
 - Final project culminated in a web-based Javascript platform game (“The Human Race”) that explored the effects of racial privilege in everyday life.
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PROJECTS

Bow & Arrow Haptic Simulation: - ECE 194T: Haptics: Perception, Engineering & Interaction

Winter 2019

C++/CHAI3D/Novint Falcon/Blender/OpenGL

- Engineered a force-feedback simulation of a bow and arrow with haptic and visual stimuli on the Novint Falcon haptic system.
- Modeled the physics of the bow string tension force and the corresponding graphical display using the CHAI3D haptic library with OpenGL.

Tactile Echoes (Simon VR) - RE-Touch Lab – UCSB Media Arts & Technology Dept.

May - September 2018

Unity3D/C#/Oculus Rift

- Built the backend functionality of the VR engine that bridged the communication between hand tracking and the haptics engine in Unity3D (C#) for Oculus Rift. Implemented the handheld memory-based game, Simon, in virtual reality with haptic and auditory feedback.

BlockbasedVR – Gevirtz Graduate School of Education – UC Santa Barbara

November 2017 – March 2018

Unity3D/C#/HTC Vive

- Reworked the architecture of *Blockbased VR*'s code to fit a model-view-controller framework, which allowed the code to be more flexible and debuggable during the project's lifespan.

MentorMeet – Mulesoft Coding Cup Hackathon - Overall Best Winner

September 2016

HTML/CSS/Javascript/Bootstrap

- Designed and prototyped a website that connects professional mentors in STEM fields with minority high school mentees. Implemented web APIs such as Google Maps and Facebook Login.
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TECHNICAL TOOLS

Programming Languages (from most to least experienced): C++, C#, Golang, Javascript/Typescript, HTML/CSS, Java, Assembly (MIPS), Python

Tools/Skills: Emacs, UNIX shell, GDB, Valgrind, CHAI3D, IoT MQTT protocols, Elasticsearch, RESTful API design, Postman, Xcode, Unity3D, Git/Github, test driven development (TDD)/unit testing, Node.js