

EDUCATION

Stanford University, Stanford, CA - **B.S. in Computer Science**

Expected June 2025

Relevant Coursework:

- Programming Abstractions
- Computer Systems from the Ground Up
- Graphics
- Operating Systems Principles
- Circuits
- Mathematical Foundations of Computing
- Digital System Design
- Electricity and Magnetism

EXPERIENCE

Virtual Reality Research Assistant, Virtual Human Interaction Lab (Stanford, CA)

September 2023 – present

- Developing VR/AR/XR projects, modeling virtual environments, and analyzing data in collaboration with researchers in the lab through Virtual Reality Intensive Training Seminar (VRITS)

Research Intern under Professor of C.S. and E.E., Sara Achour (Stanford, CA)

June 2023 – August 2023

- Researched new programming tools (language, compiler, etc.) for nontraditional computational platforms, including reconfigurable analog devices

Data Analyst Intern, Hubbub World (remote)

July 2022 – September 2022

- Collected data and created visualizations on the monkeypox epidemic
- Developed and operated data processing software
- Worked with cloud services and automation tools to process and store data

Retail Sales Associate, Staples (Concord, CA)

July 2021 – July 2022

- Multitasked on cashier, sales, and merchandising responsibilities
- Helped customers find products and solutions to tech and efficiency problems

Cofounder / Chief Technical Officer, WAVE. (Berkeley, CA)

June 2019 – July 2019

- Cofounded WAVE. through startup incubator in a team of four
- Designed and prototyped rugged sensor enclosures
- Programmed sensor measuring and wireless data reporting
- Led team members across financing, marketing, and media production

SKILLS

Programming Languages: Assembly, C, C++, C#, HTML & CSS, Java, LaTeX, Python, Verilog

Prototyping: Autodesk Inventor, Ultimaker Cura, Vivado Design Suite

Amazon Web Services: Lambda, DynamoDB, SageMaker

Digital Media: Adobe Lightroom, Premiere Pro, Photoshop, Blender, Unity Engine

Productivity: GitHub, Google Workspace, Microsoft 365

PROJECTS

RTL Music Player

2023

Programmed an FPGA into a music player. Player read notes and time values from a ROM in real-time and generated sine waves to send to an audio output. Supported combining simultaneous notes into chords. Expanded functionality included track selection, fast-forward, rewind.

ActionPi

2022 – present

Creating an open-hardware action camera. Programming capturing software that can shoot photo and video simultaneously. Designing smart LiPo-based power supply. Modeling and 3D printing high-durability enclosures compatible with traditional and GoPro mounting systems. (github.com/DevanSoliman/ActionPi)

Bare Metal Console + Wireless Chat

2022

Built an ARM-based interactive console without an operating system. Programmed memory management system, drivers for input and graphics, shell, and commands. Added a reliable two-way communication platform by writing a Wi-Fi microcontroller driver and firmware.