DEVAN SOLIMAN

(925) 822-4781

devansol@stanford.edu

https://devansoliman.github.io

EDUCATION

Stanford University - B.S. in Computer Science: Computer Engineering Track Relevant Coursework:

Expected June 2025

- Object-Oriented Programming
- Hardware Architecture
- Graphics

- Operating Systems
- Circuits
- Mathematical Foundations of Computing
- Digital System Design
- Electricity and Magnetism
- Performance Optimization

SKILLS

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

Prototyping: CAD (Autodesk Inventor), 3D-printing slicers (Ultimaker Cura), Vivado Design Suite

Digital Media: Adobe Creative Cloud (Illustrator, Lightroom, Photoshop, Premiere Pro), Blender, Unity Engine

Productivity: Git, Google Workspace, Microsoft 365 **Amazon Web Services**: DynamoDB, Lambda, SageMaker

PROJECTS

Action Camera 2022 – present

Creating an open-hardware action camera. Coding imaging software that can capture photo and video simultaneously. Designing smart LiPo-based power supplies and 3D-printable, high-durability enclosures compatible with a range of mounting systems.

RTL Music Player + Visualizer

2023

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

ARM OS + Wireless Chat

2022

Built an ARM-based desktop computer from bare metal. Programmed memory management system, drivers for input and graphics, shell, and commands. Integrated reliable two-way communication platform by writing Wi-Fi microcontroller driver, microcontroller firmware, and chatroom application.

TECHNICAL EXPERIENCE

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

September 2023 – present

 Developing XR projects, modeling virtual environments, and analyzing data in collaboration with researchers through Virtual Reality Intensive Training Seminar (VRITS)

Analog Computing Research Assistant, Stanford School of Engineering

June 2023 – August 2023

 Investigated and developed new programming tools (language, validator, compiler) for nontraditional computational platforms aimed at high-speed and high-efficiency applications

Data Analyst Intern, Hubbub (remote)

July 2022 – September 2022

- Developed software to monitor and visualize prevalence of monkeypox epidemic
- Leveraged Amazon Web Services and Microsoft Power Platform to process and store data

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

June 2019 - July 2019

- Through startup incubator, led team across financing, marketing, and media production
- Prototyped rugged, weather-resistant sensors for waste management and pollution reduction
- Programmed autonomous waste level sensing and wireless data reporting

ACTIVITIES

Communications Technician, Stanford Racing

2022 - present

Implementing long-range audio, video, and data communication between driver, vehicle, and pit crew

Cutter, Stanford Men's Ultimate Frisbee

2021 - present

Interests: Additive Manufacturing, 3D-Printing Skateboards, Mountain Biking, Tennis