

Ashley Bilbrey

www.ashleybilbrey.com

EDUCATION

University of California, Davis

Bachelor of Science, Computer Science - 3.8 GPA

Davis, CA

Sept 2020 - Jun 2024

SKILLS

Languages: JavaScript, Node.js, Python, C, C++, Java, HTML/CSS, SQL

Technologies: Flask, x86/ARM Machine Code, MongoDB, PostgreSQL, MySQL

Tools: GNU/Linux, Git, Amazon Web Services, Google Cloud Platform, Burp Suite, Hashcat, Wireshark

EXPERIENCE

UC Davis Center for Mind and Brain

Davis, CA

Software Engineer

Jun 2022 - Present

- Created ML-powered AR hearing aid that displays live captions using C#, Unity, and Microsoft HoloLens.
- Isolated audio based on user eye gaze with a beamforming algorithm through Python and Pupil Core.
- Engineered a router framework connecting three separate modules with TCP sockets in Python.
- Implemented a 3-step CI/CD pipeline to deploy across different systems using Docker and GitHub actions.

Major League Hacking

Davis, CA

Production Engineering Fellow (Meta)

Jun 2022 – Aug 2022

- Worked with 15 teammates mentored by Meta engineers in a 12-week production engineering program to build a custom content management solution in Python.
- Developed backend routes and templating using Flask and Jinja, and stored posts using MySQL.
- Automated CI/CD through Docker/GitHub Actions and error monitoring with Prometheus and Grafana.

UC Davis Student Startup Center

Davis, CA

Software Engineer & Technology Manager

Nov 2021 - Present

- Built and launched a full-stack scavenger hunt web app with Node.js and Express used by 75+ students.
- Implemented the UC Davis Central Authentication Service in Node.js to handle student logins.
- Created and taught workshops to 1,000+ people on HTML, entrepreneurship, Unity, and web frameworks.

LEADERSHIP

Cyber Security Club at UC Davis

Davis, CA

President

Jun 2022 - Present

- Raised club member count from 4 to 74 after the COVID-19 pandemic by rebuilding an officer team.
- Developed and taught original cyber security workshops to 500+ students on topics including password cracking, binary exploitation, reverse engineering, and open-source intelligence.
- Led a team of 28 students in National Cyber League and National Collegiate Cyber Defense competitions.

PROJECTS

Banshee Bot - [GitHub](#)

- Automated detection and removal of 280+ spam accounts from 120+ Discord communities using Node.js

Locat - [Info](#) - [GitHub](#)

- Built an AI-powered map of wild cats using HTML/CSS, Node.js, Express, and Google Firestore DB.

Symptom.Space - [Info](#) - [GitHub](#)

- Developed automated COVID-19 contact tracing for the Davis community including QR code check-ins, SMS alerts, and text-based authentication with Python, Flask, MongoDB, Google Cloud, and Twilio.

NoScam - [Info](#) - [GitHub](#)

- Launched scam education and tracking database with HTML/CSS, Node.js, Express, and Google Firestore.