

Aidan Melvin

aidmelvin.314@gmail.com | <https://github.com/aidmelvin> | <https://aidmelvin.github.io/personal-website/>

EDUCATION

University of Maryland, College Park

Expected Graduation: May 2024, GPA: 4.0

- B.S., Computer Science
- *Banneker-Key Scholar* (full-ride merit scholarship, granted to <0.5% of admitted students).
- *Advanced Cybersecurity Experience for Students* (ACES) Honors Living-Learning Program.

WORK EXPERIENCE

Software Engineering Intern, PayPal

May 2022 - August 2022

- Used JetBrains' TeamCity to create CI/CD flows that automatically built, tested, and deployed the code written by other team members creating a system of records for the PayPal Credit platform.
- Contributed to full-fledged unit and integration test suites to verify functionality of features on the SOR.

Software Engineering Intern, Capital One

February 2022 - April 2022

- Bolstered an in-house federated learning project by creating and testing Django database schemas.
- Created React unit testing suite for the entire project, achieved at least 80% coverage for all components.

Software Engineering Intern, Praxis Engineering

May 2021 - August 2021

- Designed a script that enables military personnel to troubleshoot of AWS Linux networks and sensors aggregating geolocation, status, and audio data, as well as parse and analyze network statistics.
- The script parsed more than 100KB/s of XML data into an easy-to-read terminal dashboard output as well as more detailed CSV output for later analysis.

ACTIVITIES AND LEADERSHIP

App Dev Club at UMD

June 2022 - Present

- Founder and president of an on-campus club that teaches over 160 students mobile app development technologies (React Native, Flutter, Xamarin) through both guided workshops and semesterly projects.

BigThink AI

September 2021 - December 2021

- Developed a TensorFlow convolutional neural network to accurately identify malaria-infected cells correctly 93 percent of the time.

Hack4Impact

September 2021 - December 2021

- Undertook a bootcamp program to learn skills including MongoDB, Node.js, and JavaScript that prepares students to carry out web development projects for local non-profit organizations.

TECHNICAL SKILLS

Languages: Python, Java, MERN stack, Ruby, OCaml, HTML/CSS, JavaScript, R, C#, C/C++

Tools/Frameworks: Linux, Git, TeamCity, Agile Method, Maven, JUnit, Jest, TensorFlow, Octave

PROJECTS

App Dev Club Website

September 2022

- Created website (<https://appdevclub.com/>) for the on-campus app development club. This website uses Google Apps Script to provide real-time information on the latest state of the club, including leadership and upcoming events.

Steganographic VoIP Software

August 2020 - April 2021

- Worked with a mentor from Praxis Engineering to design a VoIP system that uses transmitted voice data as a steganographic cover for covert text data.
- Using my system, a LAN phone call could be completed without any voice quality loss but still transferring several kilobytes per second of covert data.

AWARDS/HONORS

- Recognized as part of the Dean's List for Fall 2021 and Spring 2022