

Employment

Software Engineer **VMware, Inc.** **August 2021 – Present**

Freestyle Mobile Orchestration

- Launched a workflow orchestration engine based on Netflix Conductor and developed in Java to streamline iOS and Android device updates for 25+ Fortune 500 companies.
- Created Java template library currently used as the foundation for multiple business-wide projects.
- Reduced API and K6 performance test run times by 30% by optimizing test parameters and cleanup algorithms.

Research Assistant **University of Richmond** **May 2019 – April 2020**

Spider Robotics Lab

- Spearheaded AI research effort on more efficient building evacuation by designing a live simulation of active threat scenarios in C++ using a 3D model of a university academic building.
- Developed realistic agents capable of traversing multi-level buildings with adaptive and environment-aware behaviors.

Education

Richmond, VA **University of Richmond** **Fall 2017 – May 2021**

- B.S in Computer Science with minor in Mathematics, May 2021. GPA: 3.5
- Undergraduate Coursework: Data Structures; Discrete Structures; Software Systems Development; Computer Organization; Algorithms; Computer Networks; Artificial Intelligence; Programming Languages; Machine Learning; Database Systems.

Technical Experience

Projects

- **Quarterly.** Created a Chromium extension that aims to transform the future of remote work by prioritizing physical and mental wellness. The app reminds users to practice self-care for posture, eyestrain, and hydration. Developed in Javascript using the React.js library.
- **Accessible Spellbook.** Pioneered an Alexa application that allows visually impaired users to query the web for Dungeons and Dragons spells. Used Axios and Cheerio (DOM parsing modules) for web scraping and deployed to AWS Lambda to accelerate natural language input and output processing.
- **Neural Style Transfer.** Formalized a python toolset powered by Tensorflow that allows users to transfer the color palette and artistic style of cartoon faces onto human faces accurately using their own custom datasets.
- **College Readiness Initiative.** Launched a non-profit SAT management and studying web application that provides free test preparation to disadvantaged students in the Richmond public school system. Used MongoDB and jQuery to access student and administrator credentials and used Bootstrap and Javascript to create a responsive and fluid user interface.

Additional Experience and Awards

- **Major League Hacking** Won 1st Place Team Hack at a state-wide hackathon hosted by Major League Hacking and Github. Created a web application port for the popular party game, Codenames, developed using jQuery and Bootstrap, and hosted on Microsoft Azure.

Languages and Technologies

- C++; C; Java; Python; C#.NET; SQL; JavaScript; HTML5
- React; jQuery; Flask; Bootstrap; Tensorflow; PostgreSQL; MongoDB; Postman; Git; Spring; Gradle