Liam McFadden

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EDUCATION

Virginia Tech University
- *Bachelor of Science in Computer Science*
- *Minor in Leadership and Service*
- *December 2022 Graduation*

EXPERIENCE

NSA Cyber Exercise | *March 2022*
- Three-day NSA hosted CTF style competition between all the Senior Military Colleges (SMC) and Military Academies.
  - Took 5th place overall, beating all the other SMCs

Army Cyber Institute, Research Intern **|** *July 2021 - August 2021 | West Point, NY*
- Worked with a fellow intern under a mentor to port a large MATLAB project to Python3
  - Wrote a small python library for converting MATLAB syntax to python
- Designed and implemented a tool for the creation of configuration files using Tkinter

Vector Rideshare, Product Developer/Subteam Lead **|** *April 2020 - June 2021 | Remote*
- Collaborated with a team of other engineers on implementing the backend of a game to be integrated into the main app using TypeScript and Express.
- Organized/implemented a dashboard for managing rider covid status.
- Led a sub-team of two other developers, helped to teach basic skills such as Git and the command line, and held weekly status update meetings.

PROJECTS

Virginia Bar Association Wellness (React Native, JavaScript, Firebase) *github.com/LiamMcFadden/vbAWellnessApp*
- Worked with three other students to develop a fitness competition app for the Virginia Bar Association. Weekly client meetings were held where we discussed our progress and their expectations. Throughout the course of development, Agile methodologies were used to keep us on track to meet our client's deadlines.

Custom Web Server (C, http, AWS, Docker)
- A custom linux shell featuring pipes, I/O redirection, exclusive terminal access, and full job control.

Self Driving Car in Rocket League (Python, OpenCV) *github.com/LiamMcFadden/RL-SelfDrivingCar*
- Used Python, OpenCV, and the Win32API to successfully identify and track the ball in the game Rocket League.

SKILLS / CERTIFICATIONS

Languages: Python, C, Java, JavaScript, C++, HTML/CSS, MATLAB
Skills/Tools/Technologies: Git, GNU/Linux, Vim, React, React Native, Agile Methodologies, Firebase, Node, Flask
Secret Security Clearance

EXTRACURRICULAR

Virginia Tech Corps of Cadets / Army ROTC
- Military Style Leadership Program and Army Officer Preparation. Served in multiple positions of leadership:
  - Platoon Leader - in charge of the accountability/training of 50 other cadets.
  - Squad Leader - in charge of the accountability/development of 10 other cadets.
  - Athletics NCO - Responsible for organizing company athletics events.

VTCC / VT Cyber Club
- Competed in several CTFs and helped to teach newer members cybersecurity basics.

BOLT
- Student-led electric motorcycle design team
  - Member of the controls sub-team.