Brady A. Pettengill

me@bradyap.dev ▪ (703) 980-3247 ▪ Reston, VA ▪ www.bradyap.dev

Motivated Computational and Data Sciences student at George Mason University who enjoys solving problems and building practical software, from data analytics to full-stack apps and cybersecurity challenges. Passionate about learning new tools and creating solutions that make technology smarter and more useful!

EDUCATION

B.S. Computational and Data Sciences   **Expected May 2026**
    Minor in Computer Science
    George Mason University
Advanced Diploma, Herndon High School   **June 2022**

PROJECTS

Adaptive Cruise Control: Basic adaptive cruise control using computer vision with Python and OpenCV, communicating with the car via CAN bus and integrating with the existing cruise control through a PID controller.
Messaging App: Desktop chat platform with client-server functionality, written in Java using Swing and MySQL.
Discord Bot: Versatile bot with a range of features including music playback, weather fetching, image processing capabilities, a to-do list, and management tools. Developed in Python and later (partially) re-written in JavaScript.
Utility Website: A collection of various web apps built using the MERN stack (MongoDB, Express, ReactJS, NodeJS). Contains basic tools like a URL shortener and pastebin.

SKILLS

Languages: Python, C, C++, JavaScript, R, MATLAB, Java, SQL, Swift, Bash
Libraries: NumPy, Pandas, Scikit-learn, OpenCV, MySQL, MongoDB, NodeJS, Express
Tools/Platforms: Git, Linux, Docker, NGINX, Cloudflare, GCP, Wireshark, Ghidra, GDB, Nmap
Soft Skills: Team collaboration, problem-solving, adaptability, technical communication, leadership

EXPERIENCE

George Mason Cyber Team   **Sep. 2023 – Present**
Team Member and NCL Competitor   *Fairfax, VA*
- Compete in NCL and collegiate CTFs, focusing on web, crypto, and reverse-engineering challenges.
- Apply tools such as Burp Suite, Wireshark, Nmap, Ghidra, and GDB to identify and exploit vulnerabilities.
- Collaborate with teammates to solve real-world-style cybersecurity problems under tight time constraints.

State Farm Insurance   **May 2024 – Sep. 2025**
Digital Marketing Coordinator   *Vienna, VA*
- Created and managed digital advertising campaigns, building an online presence with the goal of driving sales.

Nando's PERi-PERi   **Dec. 2021 – May 2024**
Restaurant Manager   *Reston, VA*
- Oversaw financial performance, inventory management, marketing and outreach, and hiring/scheduling staff.

FIRST Robotics FTC Team   **Aug 2021 – May 2022**
Software Team Lead   *Reston, VA*
- Co-founded the non-school-affiliated FTC robotics team "Independent Robotics."
- Developed software for our robot, including both manual control and autonomous operation.

Herndon High School AFA CyberPatriot Team   **Sep. 2020 – June 2022**
Founder and President   *Herndon, VA*
- Founded HHS CyberPatriot team "CyberHornet," reaching national semifinals in both years of competition.
- Focused on the development of our Linux sub-team, introducing members to the use of Linux-based systems.
- Worked extensively with bash scripting to automate standard competition procedures.