Felipe Campoverde

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EDUCATION

Virginia Tech, College of Engineering, Blacksburg, VA Bachelor of Science in Computer Science 2024 - 2026 GPA: 3.0

WORK EXPERIENCE

Embedded Software Engineer VT CRO Blacksburg, VA

March 2025 - Present

- Developing a GameBoy-style educational console using ESP32-WROOM, LCD, SD card,
- Programmed games like Snake, Pong, and a customizable Mario-style platformer using C/C++
- Designed systems to allow students to create and load their own levels during summer camps

Cyber Security Instructor | Virginia Tech | Blacksburg, VA

May 2024 - August 2024

- Taught core cybersecurity concepts such as encryption, network security, and ethical hacking to school students
- Explained security topics into accessible lessons, fostering early interest in cyber defense and ethical computing

Student Assistant Manager | Virginia Tech | Blacksburg, VA

January 2024 - Present

- Supervise student coworkers, ensure food safety protocols, and manage customer-facing service stations
- Provide bilingual support (English/Spanish) and ensure smooth daily operations across various roles

PROJECTS

Multithreaded Fork/Join Threadpool with Work Stealing (C)

- Developed a threadpool system in C supporting dynamic task scheduling and load balancing
- Implemented a custom queue structure and used condition variables and mutexes for thread-safe operation

RC Car - VT CRO (C++, Python, XML, Git)

- Contributed to the development of an autonomous RC car using ROS 2, RViz, Nav2, URDF, and Gazebo
- Integrated hardware including LiDAR, RealSense camera, Arduino, and Raspberry Pi for SLAM and navigation,

Interactive Bar Chart Web App (JavaScript, HTML, CSS)

- Created a React-based web app that allows users to enter, edit, and visualize data using bar charts
- Implemented coordinated multiple views, file saving/loading, and dynamic axis label configuration

EXTRACURRICULARS

Software Engineer, VT CRO

September 2024 - Present

• Support robotics projects in a student-led team by developing software and preparing for competitions

Peer Mentor, Ceed | Virginia Tech

September 2024 - Present

• Supported first-year engineering students through mentorship, workshops, and study sessions

SKILLS

- **Programming languages:** C, C++, Python, Java, JavaScript, HTML/CSS,
- Technologies/Tools: Linux, React.js, Platform/IO, Arduino, ROS2, Rviz, Gazebo, Git,
- Other: Bilingual (English / Spanish), Team Leadership, Quick Learner, Curious