**Felipe Campoverde**

Software Engineer • (804) 356-5749 • fcampoverdeg@vt.edu • [in/fcampoverdeg/](https://www.linkedin.com/in/fcampoverdeg/) • [fcampoverdeg.dev/](https://fcampoverdeg.dev/)

# EXPERIENCE

**Chief Engineer & Software Developer: CroQuest | VT CRO |** Blacksburg, VA  ***March 2025 - Present***

* Engineered a custom educational handheld game console using ESP32-WROOM, SD card, and BLE
* Wrote 5,000+ lines of C/C++ to develop 8+ retro-style games including Snake, Pong, Tetris, and Tic Tac
* Designed and implemented Bluetooth multiplayer logic, asset rendering, and UI feedback for each game

**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

# LEADERSHIP

**Chief Engineer - CroQuest, VT Competitive Robotics Organization** ***September 2024 - June 2025***

* Led software development across multiple student-led robotics projects, guiding system design and implementation
* Mentored team members and assisted in preparing for regional and national robotics competitions

**Student Assistant Manager | Virginia Tech |** Blacksburg, VA  ***January 2024 - Present***

* Supervise student staff, enforce safety protocols, and ensure smooth day-to-day operations
* Provide bilingual (English/Spanish) support to staff and customers in high-paced service environments

**Peer Mentor, Ceed | Virginia Tech |** Blacksburg, VA  ***September 2024 - Present***

* Supported first-year engineering students through workshops, academic mentoring, and study group facilitation

# EDUCATION

# *Bachelor of Science in Computer Science · GPA: 3.0 · Blacksburg, VA Expected May 2026*

# SOFTWARE PROJECTS

**Full-Stack Portfolio Website ( React, JavaScript, HTML/CSS, Node.js, MongoDB, WebGL, Netlify, Blender)**

* Built a dynamic web app to visualize datasets via interactive charts (bar, pie, scatter) and coordinated views
* Integrated file import/export, axis configuration, and responsive UI for polished user experience
* Learn more about [Felipe Campoverde](https://fcampoverdeg.dev/)

**Autonomous Car - VT CRO ( C++, Python, ROS, RVIZ, Linux, XML, Git )**

* Developed autonomous navigation with SLAM using ROS2 and Gazebo
* Integrated hardware sensors (LiDAR, camera, Arduino) to build a fully autonomous robotics platform

**Multithreaded Fork/Join Threadpool, Concurrency, Work-Stealing, Task Queues ( C )**

* Designed a high-performance threadpool supporting dynamic task distribution and parallel execution
* Implemented thread-safe queues and synchronization using condition variables and mutexes

# SKILLS

* **Languages** C, C++, Python, Java, JavaScript, HTML, CSS
* **Web & Full-Stack Development** React.js, Zustand, Node.js, Express, MongoDB, REST APIs
* **Embedded & Robotics** ESP32, Arduino, PlatformIO, Bluetooth (BLE), ROS2, URDF, RViz, Gazebo, LiDAR, RealSense
* **Tools & Platforms** Git, Linux, VSCode, Netlify, Blender, SD Card Interfaces, WebGL