

Falls Church, Virginia (571) 395-5448 boernerc20@gmail.com		<div>Christopher Boerner</div> <div>Computer Engineer</div>	U.S. Citizen Eagle Scout
Computer Engineer with interests in computer/electrical hardware and embedded technology. ↔ Currently working on my Masters of Engineering in an accelerated program at Virginia Tech.		linkedin.com/boernerc20 github.com/boernerc20	
Skills			
Languages: Bash, C/C++, Java, MATLAB, Python, Verilog			
Software: Altium Designer, Arduino, Cadence Virtuoso, CMake, Git, Linux, LTSpice, OpenCV, Pandas, PyTorch, Qt, SciKit-Learn, SolidWorks, Xilinx Vivado			
Hardware: PCB Design, Breadboarding, Computer Architecture, Oscilloscope, Multimeter, Soldering			
Education			
Master of Engineering in Computer Engineering Virginia Tech – Focused on Computer Systems – GPA: 3.8 Advisers: Dr. Cindy Yi (Virginia Tech)		May 2025 Alexandria, Virginia	
Bachelor of Science in Computer Engineering Virginia Tech – General Computer Engineering – GPA: 3.6		May 2024 Blacksburg, Virginia	
Technical Experience			
Grading Embedded Systems Embedded Systems · Grader		Sep 2024 – Dec 2024 Blacksburg, Virginia	
<ul style="list-style-type: none">Grade homework assignments and coding projectsUse C language for TI MSP432 microcontroller-based systems.Collaborate with TAs and the professor to ensure smooth course operations			
Embedded Systems Research Expe-SmartHouse Project Grenoble Electrical Engineering Laboratory · Research Intern		Jun 2024 – Aug 2024 Grenoble, France	
<ul style="list-style-type: none">Developed a centralized broker network connecting miniature smart homes, an energy manager, and a photovoltaic panel using various microcontrollers and coding languages.Worked with the MAGE research team on an Ecodistrict mockup.			
Cybersecurity Infrastructure Developmen ICAM Framework Deloitte · GPS Advisory Cyber Intern		Jun 2023 – Aug 2023 Rosslyn, Virginia	
<ul style="list-style-type: none">Worked with a government client on improving their cybersecurity framework using an identity governance and administration solutionDeveloped visuals and process cycles for a business requirements documentImproved soft skills by participating in conferences and leading presentations			
Computer Architecture Research FPGA Systems Systems Software Research Group · Student Researcher		Sep 2022 – May 2023 Blacksburg, Virginia	
<ul style="list-style-type: none">Created a script to automatically run complex benchmarks on a FPGA-based heterogeneous computer system and collect dataImplemented RISC-V 64-bit architectures on a Xilinx FPGAModified the instruction execution phase of the processor to prevent cyber attacks			
Information Technology Support IT Sector U.S. Department of State · Intern		May 2021 – Jun 2021 Riyadh, Saudi Arabia	
<ul style="list-style-type: none">Upgraded the technological infrastructure of the U.S. Embassy Riyadh by replacing CPUsMaintained and managed the inventory of computers and peripherals			
Projects			
Senior Design Project Aircraft Data Acquisition Device (capstone_brochure.pdf)		Aug 2023 – May 2024	
<ul style="list-style-type: none">Created a DAD that can read sensor data over a 60ft distance using a current loopTransmitted sensor data packets wirelessly using radio transceivers to a handheld unit			
FPV Drone Design and Construction		May 2023 – Aug 2023	
<ul style="list-style-type: none">Built and soldered a custom FPV drone for cinematic drone footageIntegration of flight controller, ESCs, transmission system, and GPS			
Integrated Design Project Blood Oxygen Sensor		Jan 2022 – May 2022	
<ul style="list-style-type: none">Created a multi-stage amplification and filtration circuitMultiplexes between two conditioned signals to calculate a person's blood oxygen			