Anthony Cherubino (He/Him)

(908) 499-9412 | atcherubino@gmail.com

Education

Northeastern University, Boston, MA — September 2018 -
MS Electrical & Computer Engineering with Concentration in Computer Systems & Software | GPA: 3.8 — May 2023
BS Computer Engineering | GPA: 3.5 – Cum Laude — May 2022
Honors: College of Engineering Dean's Scholarship, Dean's List
Courses: Computer Architecture, Computer Systems, Embedded Design, Operating Systems, High-Performance Computing, Fundamentals of Algorithms, Software Security, Networks, Cybersecurity, Digital Design, and Electronics, Database Design & Management Systems, Calculus 2, Physics 2, Differential Equations & Linear Algebra, Technical Writing, Intl. Business & Global Social Responsibility, Macroeconomics, Microeconomics
Activities: Engineers Without Borders, Institute of Electrical and Electronics Engineers (IEEE)
Experiences: Studied Abroad in South Africa (July-August 2019)

Skills

Languages: C, C++, Python, Bash, R, Java, JavaScript, SQL, LaTeX, HTML
Software: Arduino, AWS, BitBucket, Clang/LLVM, CLI, Confluence, Docker, GCC/G++, G Suite, Git, GitHub, Grafana, Jira, Linux, MATLAB, Office, OpenAI GPT-3/4, OpenMP/Pthreads, OpenVPN, Skype, Slack, STM32, MongoDB, Teams, MySQL, Unraid, Windows, WireGuard, Zoom
Hardware: FPGA, Logic Analyzer, Multimeter, Oscilloscope, Function Generator, Soldering, Computer Building

Project Experience

Personal Media Server — 2016 - Present
- Researched, designed, and built server in order to run 24/7 and be fully manageable remotely using OpenVPN
- Used Unraid to manage drives in a 120+ TB storage array and used Docker to host applications
- Acted as server admin managing 25+ users connecting and streaming content from around the world daily

Universal Power Converter – 1st Place Capstone Design Competition — July-December 2021
- Worked in a team to design, build, and test a custom PCB buck-boost converter that is portable and takes one or two DC input(s) to convert the voltage up or down to a dynamic user-specified DC output
- Used an STM32 microcontroller to manage the functionality of the system and control the screen-based UI
- Presented to a panel of judges and was awarded First Place in the Fall 2021 ECE Capstone Design Competition

Autonomous Snow Plow — January-May 2019
- Used Solidworks to design 3D printed parts and built a robotic prototype that could clear a driveway of snow
- Programmed it in C++ to function either fully autonomously or remotely controlled using an IR remote
- Presented the functionality of the robot at a live exhibition for peers

Work Experience

WHOOP, Inc., Boston, MA — January-June 2021
Embedded Firmware Engineer Co-op
- Developed internal tools to profile the power usage of the next-gen wearable device that was in development to determine the power draw of each subsystem and identify any regressions between firmware versions
- Created a command-line utility to generate data strings used to test and validate NFC communications between the wearable and battery pack, significantly saving time versus manually determining the values
- Used Git and GitHub for version control, managing pull requests and atomic commits using the Conventional Commits standard and a rebase workflow
- Utilized Agile development practices, participating in sprint planning and standups as well as tracking tasks and deliverables using Jira
- Worked both in-person and remotely using Slack and Zoom to communicate effectively with my teammates

Johnson & Johnson DePuy Synthes Mitek Sports Medicine, Raynham, MA — January-June 2020
Software\Hardware Electrical Engineering Co-op
- Used Rhapsody to develop a robust IPC system allowing for workflow integration of capital medical devices
- Led quality testing for a major software revision documenting bugs and ensuring products functioned correctly
- Designed and created a tool in Excel that significantly saved time generating hex codes that corresponded to a pixel display versus the established method of manual calculation
- Utilized Git and Bitbucket for source control and code reviews across multiple projects and repositories
- Participated in Agile Sprint planning and tracked tasks and deliverables using Jira
- Collaborated with a multidisciplinary team both in-person and remotely through Zoom, Skype, and Teams