Leo Berman

Computer Engineer

LinkedIn | 215-767-6705 | Personal Site | LeoGrantBerman@gmail.com | GitHub

Professional Summary

Emerging Computer Engineering graduate with a drive to utilize problem solving in programming. I'm currently seeking to apply my skills and experience to a development role with a focus on software development.

Education

Temple University **Philadelphia, PA**

BS Computer Engineering August 2021 – December 2024

- GPA: 3.97
- Dean's List, IEEE HKN Honor's Society

Languages & Technologies

Languages: Python, C/C++, Assembly (AVR, MIPS), VBA, Bash/Shell, HTML/CSS, JavaScript, PLC Ladder Logic

Technologies: Git, AWS (Cloud Practitioner Certified), Linux (Debian) , Docker, Atmel, FPGA (Xilinx), SOC (Zybo), AutoCAD, Jira, GDB, FreeRTOS, SQL, MongoDB

Experience

Automation Engineering Intern **May 2024 – August 2024**

Ezsoft. Inc Malvern, PA

- Programmed component-based software for PLCs (Programmable Logic Controllers) for applications in industrial food & beverage and pharmaceuticals to ISA-88 and ISA-95 standards
- Created a set of internal Python/VBA applications to execute mass code changes on text-based ladder logic programs. The tools reduced errors for rote tasks and created in-program error checking. I used these scripts to save 4+ hours of billable on-site hours for customers.
- Investigated time-sensitive system failures using a combination of on-site visits and remote access

Research Assistant **March 2024 – Current**

Dr. Samuel Rosen's BDC Research Lab Philadelphia, PA

- Utilizing Pandas, Beautiful Soup, Pyppeteer, Selenium, and Requests Python libraries to scrape Schedule of Investment tables from the SEC
- Helping to manage teams of research assistants by implementing Python code standards based on PEP8
- Successfully implemented novel approach using cell element sizes to improve deliverable time by 400% from 24+ hours to less than 6 hours

Research Assistant **May 2023 – August 2023**

Dr. Jim Napolitano's Nuclear Physics Research Lab Philadelphia, PA

- Collaborating with physicists to reduce error rate for a portion of the MOLLER (Measurement Of Lepton Lepton Elastic Reaction) experiment
- Developing Python scripts to write time and wavelength spectrums for emulating deadtime
- Debugging WaveDump, an open-source data collection software written in C, to automate data entry from FPGA digitizers directly to external disks.

Projects

Breast Cancer Digital Pathology System – Working with machine learning specialists to design novel Machine Learning systems for breast cancer diagnosis (GitHub)

Upcycling Treadmill to Web-Controlled Walk Pad – Converting treadmill to low profile walk pad controlled via web interface (GitHub)

Mentorships

Science Fair Judge: The Langley School | McLean Virginia

Mathematics & Physics Tutor: Algebra | Calculus | Statistics | Classical Physics