Suzan Manasreh

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Education

Georgia Institute of Technology — Atlanta, GA

Bachelor of Science, Computer Science; ***GPA: 3.8/4.00*** — *Expected: December 2024*

Threads: System-Architecture/Modeling-Simulation

Awards: Faculty Honors, Dean's List, President's Undergraduate Research Award

Relevant Coursework: Data Structures & Algorithms, Computer Organization & Programming, Systems & Networks, Operating Systems, Digital Design, Processor Design, Intro to AI, Intro to High-Performance Computing, Probability & Statistics, Linear Algebra, Differential Equations

Course Projects: OS Multi-threading, HPC Parallel matrix algorithms, AI Inference algorithms

Skills

Languages: Python, C/C++, Java, Go, Javascript, Typescript, Fortran, Shell, Kotlin, Mathematica, R, x86 Assembly, VHDL, Verilog

Tools & Technologies: Node.js, React.js, Ruby on Rails, PostgreSQL, Linux/Unix, Git, Docker, Gerrit, Gitlab, Jira, Postman, Jupyter Notebooks, Matplotlib, MPI, Paraview, Quartus Prime, GNU Compilers, CMake

Methodologies: Agile, Scrum, OOP, DevOps, CI/CD, TDD

Professional Experience

Cisco Meraki — Remote

Full Stack Software Engineering Intern — *May 2023 – August 2023*

- Worked with the DashXL team to design, develop, test, and deploy the API for a tool that adds or removes feature flags for customers.
- Built a backend with Ruby on Rails and Go that sends out requests across 100's of units of a distributed system and aggregates the data back for the user.
- Integrated the tool into Meraki's user-facing dashboard.

IBM — Remote

Software Developer Intern — *May 2022 – August 2022*

- Worked with an IBM Z DevOps team to get the Dependency Based Build API ready for a new release by fixing security issues, correcting defects, and developing new features.
- Used Java, Javascript, HTML, and Jenkins to design, develop, and test a method to statically generate customer-facing build report web pages.

University Experience

GT Computational Physics Research Group — Atlanta, GA

Undergraduate Researcher — *October 2023 – Present*

- Achieved 11% speedup on large-scale parallel (MPI) Fortran cell simulator code by updating and utilizing linear algebra libraries (PETSc/Lapack) and integrated them into a new build system.
- Created cell-scale CFD simulations, visualized simulation graphics with Paraview, and analyzed data with Python
- Created CI/CD pipeline for testing and profiling subroutines and contributed to open-source codebase.

GT CS 2340: Objects & Design — Atlanta, GA

Teaching Assistant — *January 2023 – December 2023*

- Developed course materials on software diagrams, design principles, and android development in Kotlin.
- Held office hours, project demos, and assisted in grading of 700+ students.
- Helped develop the auto-grader and course website using React, Typescript, and Markdown.