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 Lab, Processor Design, Intro to AI, Intro to High-Performance Computing, Probability & Statistics, Linear Algebra, Differential Equations

Activities: GT Rowing, Art club

Skills

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

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, FPGA's, GNU Compilers, CMake, XCode

Skills: Agile, Scrum, OOP, DevOps, CI/CD, TDD, Data Visualization

Work Experience

Full Stack Software Engineering Intern Remote

Cisco Meraki *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. Integrated the tool into Meraki's user-facing dashboard.
- 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.

Software Developer Intern Remote

IBM *May 2022 – August 2022*

- Worked with an IBM Z/OS 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

Student Assistant, Computational Physics Group Atlanta, GA

GT Computational Science & Engineering *May 2024 – Present*

- Achieved 11% speedup on large-scale parallel Fortran cell simulator code by updating and utilizing linear algebra libraries and integrated them into a new automated build system with CMake, shell, and Python.
- Created CFD simulations of capsule flow through microfluidic device meshes, analyzed time-series data with matplotlib and numpy, and ray-traced simulation graphics in Paraview with GPU's.
- Created CI/CD pipeline for testing and profiling subroutines on distributed system (HPC cluster).

Undergraduate Researcher, Rogues Gallery Atlanta, GA

GT Vertically Integrated Projects *January 2023 – December 2023*

- Implemented SLAM algorithm with spiking neural networks and Lava framework for neuromorphic hardware.
- Used TensorRT to help train Jetson NANO to detect objects efficiently.

Teaching Assistant, CS 2340: Objects & Design Atlanta, GA

GT College of Computing *January 2023 – December 2023*

- Held office hours and did grading for 700+ students on Swift, Android Studio, and React app projects.
- Created course materials on software architecture & design principles.
- Helped develop course website in React.