Suzan Manasreh

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EDUCATION

Georgia Institute of Technology   Atlanta, GA
Master of Science, Computer Science   *Expected: December 2025*

Georgia Institute of Technology   Atlanta, GA
Bachelor of Science, Computer Science; ***GPA: 3.82/4.00***   *Received: December 2024*

   Threads: System-Architecture/Modeling-Simulation

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

   Relevant Coursework: Data Structures & Algorithms, Computer Architecture, Networking, Operating Systems, Digital Design, Processor Design, Intro to AI, Machine Learning, High-Performance Computing, Statistics

   Leadership: Operating Systems TA (Fall 2024), Objects & Design TA (Spring-Fall 2023)

SKILLS

Languages: C/C++, Python, Java, Javascript, Ruby, Go, Fortran, Shell, Matlab, ASM, VHDL, Verilog

Tools & Technologies: Node.js, React.js, Ruby on Rails, PostgreSQL, Linux/Unix, Git, Docker, Gerrit, Jenkins, Gitlab, Jira, Postman, YAML, Jupyter Notebooks, Matplotlib, NumPy, Sci-kit Learn, MPI, Paraview, Quartus Prime, FPGA's, Compilers, CMake, VSCode, XCode, Oscilloscopes, CAD tools

WORK EXPERIENCE

Full Stack Software Engineering Intern   Remote
Cisco Meraki   *May 2023 – August 2023*
- Closed 4+ tickets with dash horizontal scaling team while building the REST API for a tool that adds or removes feature flags for customer's cloud network configurations on PostgreSQL servers and updating infra tests.
- Built a backend with Ruby on Rails and Go that sends out requests across distributed system shards and aggregates the data back for the user. Tested with RSpec and Go mock API tests.

Software Developer Intern   Remote
IBM   *May 2022 – August 2022*
- Worked with the Dependency Based Build team on Z/OS to get their API ready for a new release by fixing a security issue, correcting defects, and developing a new feature.
- Used Java, Javascript, HTML, and Jenkins to design, develop, test, and deploy a method to statically generate customer-facing build report web pages from parsed data.

UNIVERSITY EXPERIENCE/PROJECTS

Teaching Assistant   Atlanta, GA
College of Computing at Georgia Tech   *January 2023 – December 2024*
- Helped students with kernel labs in C on xv6 Unix-like teaching OS in CS 3210, run through Docker container.
- Developed and taught lecture and lab material on virtual memory, multi-threading, scheduling, and file systems.
- Helped develop CS 2340 course website in React/Typescript/CSS and back-end content management system.
- Assessed student's on design patterns, software development, and mobile development in Android Studio/ SwiftUI.

Research Assistant   Atlanta, GA
Computational Physics Group at Georgia Tech   *May 2024 – August 2024*
- Achieved 11% speedup on open-source MPI-parallelized Fortran simulator by optimizing linear algebra library use.
- Created new build system for cross-platform builds across MacOS, Linux, and other systems with CMake/Shell.
- Created 3D simulations of capsule flow through meshes made with Coreform Cubit, analyzed simulation data with NumPy and SciPy, and ray-traced simulation graphics in Paraview with GPU's. Accepted to SC'24.
- Created Github Actions CI/CD pipeline via YAML for testing and profiling subroutines on HPC CPU cluster.

Undergraduate Researcher   Atlanta, GA
CRNCH Rogues Gallery at Georgia Tech   *January 2023 – December 2023*
- Helped create SLAM algorithm with spiking neural networks and Lava framework for neuromorphic hardware.
- Used YOLOv5 and PyTorch for real-time object detection with TensorRT on the Jetson Nano.