Tejas Vermani

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Education

Master of Science - Georgia Institute of Technology | Atlanta, GA

August 2024 – December 2025

• Candidate for Master of Science, Machine Learning

Bachelor of Science - Georgia Institute of Technology | Atlanta, GA

August 2021 - December 2024

- Candidate for Bachelor of Science, Computer Science
- Concentrations in Intelligence, Modeling and Simulation

GPA: 3.8

• Faculty Honors - Fall 2022, 2023; Dean's List - Fall 2021, Spring 2022, 2023, 2024

Relevant Courses: Deep Learning, Machine Learning, High Performance Computing, Computer Systems & Networking, Robotics and Perception, Data Structures & Algorithms, Probability & Statistics, Databases, Computer Vision

Work Experience

CVS Health

May – August 2024

Software Engineering Intern

New York City, NY

- Implemented automatic client-side field-level encryption for sensitive patient data for MongoDB in Spring Boot
- Built custom Kubernetes resource connectors for dynamically provisioning and scaling application resources
- Developed connectors from MongoDB and Snowflake to Kafka, enabling seamless data integration and streaming

NSF Smart and Connected Cities (SCC-IT) Research Project

January – May 2024

Atlanta, GA

Software Engineering Research Assistant

- Designed and developed the database schema in Firebase, assisting the frontend team with CRUD operations
- Developed and tested Firebase Functions to support deployment of TranSACT application in field experiments

Carrier Global May – September 2023

Software Engineering & Architecture Intern @ Digital Foundry Team

Palm Beach Gardens, FL

- Fine-tuned an open-source large language model for internal use, trained on documentation of the Digital Foundry
- Implemented models to detect anomalies in Indoor Air Quality data with K-means clusters and Random Cut Forest
- Leveraged AWS Glue to architect a data governance policy for Carrier.io pipeline
- Assisted in establishing a machine learning operations pipeline to streamline model deployment and workflows

Projects

Autonomous and Connected Transportation (ACT) Driving Simulator

Aug 2022 - May 2024

- Studied and implemented state-of-the-art multi-objective optimization solution algorithms for autonomous vehicles
- Modeled multi-objective problems and developed appropriate solution methods given data
- Programmed labor rotation cost optimization model, minimizing costs

WebDev @ Georgia Tech: Event Ticketing and Management

Jan – May 2024

• Architected PostgreSQL database schema and implemented Prisma migrations for full-stack web application Assisted with building backend APIs with Express.js and connecting them to frontend within the Next.js framework

Campus Discovery @ Georgia Tech

Aug - Dec 2022

- Built a web application that allows Georgia Tech affiliates to view, create, and register events on campus
- Used React JS to implement RESTful web architecture, and Google Maps API to create interactive map of events
- Used Firebase as backend to store user and event data and send and receive said data to and from front-end

Leadership

Chief Investment Officer: GT Investments Management Club

Aug 2023 - Current

- Authored fund's investment strategy, detailing asset allocation, rebalancing policy, and risk management
- Led tech team, with the goal of implementing quantitative methods to inform fundamental strategies
- Raised and managed \$100k+ in privately raised capital, outperforming benchmarks, and oversaw sector heads

Skills

Programming Languages: Java, Python, C, C++, JavaScript, TypeScript, Swift, MySQL, PostgreSQL

Frameworks: Spring Boot, Node.js, Django, Next.js, React, Express.js, TailwindCSS

Technologies: AWS, Docker, Azure, Git, PostgreSQL, Firebase, MongoDB, MPI, Kafka, Kubernetes, Vercel, Jenkins