Aamir Mohsin

(682) 561-6810 | aamirsmohsin@utexas.edu | aamirsmohsin.com | github.com/aamirsmohsin

EDUCATION

The University of Texas at Austin   Austin, TX
B.S. Electrical and Computer Engineering | Engineering Honors Program   *Aug 2021 – May 2025*
Overall GPA: 4.00/4.00

EXPERIENCE

Capital One   McLean, VA
Software Engineer Intern   *Jun 2024 – Aug 2024*
- Build a full-stack application on the card fraud team – using React, Fastify, AWS Lambda/SQS, and Kafka

University of Texas Department of ECE   Austin, TX
Algorithms Teaching Assistant   *Jan 2024 – May 2024*
- Instructed 120+ students in advanced algorithm topics such as dynamic programming by hosting office hours
- Graded weekly homework assignments, programming labs, and exams while providing feedback to students

Walmart Global Tech   Dallas, TX
Software Engineer Intern   *May 2023 – Aug 2023*
- Built a REST API using Flask to transmit images from robotic inventory scanners to Sam's Club mobile apps
- Reduced inventory location errors by 47% in 600+ stores by providing updated product locations to associates
- Deployed the API on Azure App Service by leveraging Terraform configuration files to provision resources

Texas Computational Materials Lab   Austin, TX
Undergraduate Research Assistant   *Jan 2022 – Dec 2022*
- Created a Python script to simulate 5,000+ fuel cell reactions to determine potential battery catalysts
- Preprocesssed a dataset of 13,000+ nanoparticles for a ML model by removing redundant and incorrect entries
- Designed an algorithm to confirm the convergence of nanoparticle reactions, achieving an 87% accuracy rate

PROJECTS

Jump Finance | React, FastAPI, MySQL, Google Cloud Platform   *Sep 2023 – Present*
- Work as a contracted developer to build a web portal that manages payment statuses of 450+ university students
- Implement user authentication and authorization using OAuth with JWT to validate access to API requests
- Automate 600+ monthly invoice due date reminder messages using the WhatsApp API and GCP Cloud Functions

Meals on Wheels Central Texas | React, Flask, Salesforce   *Jan 2023 – May 2023*
- Worked as a contracted developer to build a web application for use by 8,000+ meal delivery volunteers
- Built a REST API using Flask to automate delivery route creation, helping volunteers deliver 3,000+ daily meals
- Created login and route display UI pages using React and React Router to control page transitions

LEADERSHIP AND ACTIVITIES

Texas Convergent   Austin, TX
Technical Lead   *Sep 2022 – Present*
- Lead a team of 5 engineers on semester-long startup projects by managing deliverables and liaising with founders
- Create a web development curriculum for 150+ students, covering frontend frameworks, backend, and databases

ADDITIONAL INFORMATION

Languages: Python, Java, C/C++, JavaScript, TypeScript, HTML/CSS, Assembly
Frameworks/Technologies: Flask, FastAPI, Fastify, SQL/NoSQL DBs, Azure, AWS, Git, Docker, Kafka, React
Relevant Coursework: Data Structures, Algorithms, Parallel Computing, Compilers, Operating Systems (IP)
Interests: Backpacking, Running, Exploring New Restaurants, Fantasy Football, Speech and Debate, LeBron James