

# Aamir Mohsin

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

## 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*

- Develop a React/Fastify web application to automate fraud referrals, saving fraud investigators 177 days per year and 1.5 million in lost fraud capital
- Wrote an AWS Lambda to post referral information to a Kafka Topic, expediting 38,000 fraud cases per year
- Testing – unit tested frontend/backend using React testing/vitest

### 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
- Preprocessed 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*

- mentorship – mentor and lead a group of 5 engineers, include PM responsibility, liaison with startup founders
- development – create a technical curriculum covering web development basics like React, React Router, databases
- social bullet point – manage budget to get food, execute club-wide socials

## 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