Saad Mahboob

717-203-6119 | saadmahboob.com | linkedin.com/in/smahboob | github.com/smahboob | saadmahboob3@gmail.com

EDUCATION

Franklin and Marshall College
B.A. - Double major in Computer Science and Business Organizations
Awards: Honors List Spring'20 and Fall'20 | Dean's List Fall'19 and Fall'18
Other Achievements: Davis Projects for Peace | Bagdasarian International Study Fund | 100% Merit Scholarship

WORK EXPERIENCE

Full Stack Software Engineer | Morgan Stanley — Aug 2022 – Present

- Built and deployed an Agentic AI workflow orchestration pipeline to automate account-maintenance requests (beneficiary adds, name changes, tax validation), reducing manual support effort and improving turnaround time.
- Built an intelligent document processing platform using OCR and GPT-5 to extract and validate data from financial documents, transforming unstructured data into formatted tables with highlighted document citations.
- Implemented document translation, summarization, source of wealth corroboration using Chain of Thought prompting, MapReduce summarization, embeddings, and Retrieval-Augmented Generation (RAG).
- 1st Place (2024 & 2025) GenAI Hackathons (3,000+ participants): Led winning teams to deliver an IDP platform (2024) and an OpenAI-powered advisor chatbot (2025) for real-time workflow Q&A.
- Worked with the workflow team to automate banking processes like incoming wires, Ach, and security transfers, handling 5 million document uploads and millions of transactions per year.

Android Cybersecurity Developer | Franklin and Marshall College — June 2021 – Aug 2021

- Developed research software with an academic advisor to identify any leaks of sensitive information on devices.
- Improved program efficiency by 15%, implementing an optimized graph structure that can perform faster lookups.

Software Engineer, Android | Hope Within Community Health Center — April 2021 – July 2021

- Utilized Agile methodology to develop a mobile application for patients to request and track medication refills.
- Helped the clinic improve the refill response time by 25%, with patients having 24-hour access to submit requests.
- Led a team of 4, conducted design reviews, code reviews, and published the application on the Google Play Store.

Artificial Intelligence Research Assistant | Franklin and Marshall College — Jan 2021 – May 2021

- Implemented a task planner on a socially assistive robot that can plan tasks to help sort medications.
- Reduced the task planning calculations of the robot by 10%, bringing down latency on larger domains.
- Developed an end-to-end universal Task Planning Parser that can parse out the HDDL input for a robot.

TECHNICAL PROJECTS

Accountya | iOS & Android | Swift, Java

- Created a responsive mobile application to solve complex cost and financial accounting formulas.
- The app has 750+ downloads and 10,000+ impressions on the Apple App Store.

Hacker Quiz | Android | SQLite, Lottie

- Designed and developed an Android application for software developers to test their programming skills.

Halal Eats | Android | Drexel Hackathon, Java

- Created an Android application to help find halal restaurants in the top cities of the United States using the Google Maps API and android recycler view.

Algorithm Visualizer | Web | React, HTML/CSS, Bootstrap

- Created a React application using reusable style components for visualizing 5 different sorting algorithms and comparing their time complexities.

TECHNICAL SKILLS

Languages: Java • Python • HTML/CSS • JavaScript • TypeScript • C++ • C#
Technologies: Git • Kafka • MQ • IBM DB2 • PostgreSQL • RESTful API • Linux
Frameworks: Spring Boot • Junit • Angular • React • Jasmine • Karma
GenAI and LLM: Chain of Thought (CoT) • Few-shots • MapReduce • Retrieval-Augmented Generation (RAG) • Langchain

COURSEWORK

Mobile Applications Development • Algorithms • Human Computer Interaction • Python Problem Solving • Java Data Structures
Dynamic Programming (CS3) • Theory of Computational Science • Computer Organizations • Discrete Mathematic
Computer Networking • Operating Systems • Probability and Statistics • Calculus II • Symbolic Logic