Ammaar Saadat

Education & Awards

University of Michigan - Ann Arbor

May 2025

Bachelor of Engineering - Computer Science and Engineering Dean's List - Honors Recognition

Ann Arbor, Michigan

Michigander Scholars in Semiconductors Scholarship

Jan. 2025

Awarded \$5,000 for academic excellence and commitment to Michigan's semiconductor industry.

Ann Arbor, Michigan

Courses: Operating Systems, Web Systems, Computer Security, User Interface Development, Computer Architecture, Info Retrieval, Human-Centered Software, Data Driven Software, Linear Algebra, Calc I-III

Experience

KLA May 2024 - Aug. 2024

 $Software\ Engineering\ Intern\ -\ Java,\ gRPC,\ DevOps,\ REST,\ protobuf,\ CI/CD$

Ann Arbor, Michigan

- Developed a scalable API web app that integrates hardware controllers using a microservice and plug-in based architecture
- Introduced automation by utilizing gRPC, Java, and protobuf to decrease tool interface development time by 50% across company 3+ divisions

MIDAS, University of Michigan Institute of Data Science

Nov. 2023 - May 2024

Web Intern — HTML, CSS5, WordPress, AwesomeTables, WPBakery

University of Michigan

- Collaborated with MIDAS team to continuously integrate feedback onto web pages catered to UofM's Institute of Data Science to automate and enhance user interface experience
- Improved the website's traffic flow by optimizing 12+ web pages during the F23/W24 semesters

Vitra - Google x MHacks

April. 2024

Web App Developer — Gemini Pro 1.5, Python, Flask, React.js

University of Michigan

- Developed Vitra, a real-time voice transliteration mobile/web app using Python, Flask, and Vite React.js along with Google's Gemini Pro 1.5 model to support over 40 languages
- Proactively collaborated under 24 hour constraints to deliver MVP of app for healthcare professionals that reduces miscommunication to minorities

Projects

Search Engine | Python, SQL, Jinja2, HTML/CSS5, Bash

Apr. 2024

- Implemented a map-reduce pipeline using Python and SQL databases to develop a scalable search engine similar to Google or Bing using a segmented inverted index
- Analyzed a database of 2000+ web pages to calculate the term frequency, inverse document frequency, and page priority to produce an inverted index system after Google's PageRank model

Instagram Clone - Insta485 (Team Project) | React.js, AWS, Flask, Python, SQLite, JavaScript

Feb. 2024

- Developed a Instagram clone web app hosted on an AWS node using server/client side dynamic pages and REST APIs
- Implemented a full-stack web app enabling users to create posts, comments, personalized profiles with a pagination feed by leveraging Flask, Python, React.js, and a SQLite database to support over 1000 users

Piazza Classifier Machine Learning AI Algorithm $\mid C++, CSV$

Mar. 2023

- Designed a classifier machine that identifies topics of posts on the community web application, Piazza, using the bag of words model and training data
- Collaborated with a team to build an accurate algorithm that has a 90% prediction rate with reports of vocable frequencies, intel labeling, and version control system updating

Technical Skills & Interests

Languages: Python, Java, C++, C, JavaScript, Swift, Flutter, HTML/CSS5

Developer Tools: VSCode, Intellij, XCode, MATLAB, GM Studio 2, Maven

Frameworks: React.js, DevOps, Flask, MySQL, Django, gRPC, REST, Microsoft Excel, WordPress, WPBakery

Interests: Volleyball, Hiking, Gardening, Pokemon Go, Raspberry Pi-5, Networking