

AASHER AKHLAQUE

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EDUCATION

University of Michigan – Ann Arbor

Bachelor of Science in Computer Science and Mathematics

Ann Arbor, MI

May 2023

- **GPA:** 3.86/4.00
- **Awards & Honors:** James B. Angell Scholar (All 'A' record for 3 consecutive terms), 4 Term University Honors (3.5+ GPA)
- **Relevant Coursework:** Machine Learning, Web Systems, Computer Architecture & Organization, Linear Algebra, Data Structures & Algorithms, Probability & Statistics

WORK EXPERIENCE

University of Michigan College of Engineering (COE)

Software Engineer

Ann Arbor, MI

May 2021 – Present

- Developed a scalable application deployed in AWS to provide students with study resources including contextual search in lecture recordings, flash cards generation from lecture slides.
- Reported directly to Professor Perry Samson and helped the project win NSF funding.
- Wrote distributable React components for UMich COE IT department ([CAEN](#)) to allow 50+ UMich courses to avail the platform and provide the resources to 3000+ students for Fall 2021 term.
- Formulated and implemented the login and authentication workflow using PHP OpenSSL encryption/decryption.
- Created Cron jobs to fetch data from CAEN APIs and update database with new courses, users, lecture materials.
- Implemented REST API in Flask back-end with API keys to securely exchange information with the front-end.
- Now conducting surveys for opinions on UI/UX and potential study resources to improve and expand the app.

University of Michigan EECS

Teaching Assistant for Data Structures & Algorithms

Ann Arbor, MI

January 2021 – Present

- Assist professors teach the course with 800+ students per semester covering topics including complexity analysis, hash tables, trees, graph algorithms, and algorithm families.
- Lead a weekly lecture review section with 50+ students, answer conceptual questions on Piazza and during lectures, ideate and formulate exam content.
- Hold 7+ office hours per week to explain and demonstrate algorithms for projects.

The Michigan Daily (TMD)

Full Stack Web Developer

Ann Arbor, MI

September 2020 – Present

- Maintain and progress the digital products of TMD including the [Daily website](#).
- Coordinate with the Design and Data teams to develop 5+ Magnify websites for events including [Elections 2020](#), [Covid1Year](#), [Valentine Edition](#) using React.js, Node.js, D3.js.
- Collaborate with a team of 5+ to develop mobile application using React Native to expand the accessibility of TMD news and updates.

PROJECT EXPERIENCE

The Michigan Daily (TMD) Business Ad Portal

May 2021 – August 2021

- Developed the front-end of a portal using React, Typescript, and Material-UI to digitalize and automate the ad booking process between advertisers and the Business team reducing human involvement by 60%.
- Used React Context to maintain a cart of ad slots selected by the advertiser.
- Interacted with REST API to allow advertisers to add, delete, and modify ad orders.

Instagram Clone

March 2021

- Built an Instagram clone to allow users to create, update, or delete user accounts, posts, comments etc.
- Used Flask backend to dynamically render Jinja2 templated HTML files with data from SQLite database.
- Wrote a client application in JavaScript that runs in the browser and makes AJAX calls to a REST API.

SKILLS & AWARDS

- **Tools & Technologies:** (Proficient) C++, Python, JavaScript, React.js, TypeScript, HTML5, CSS3, SQL, Flask, (Prior Experience) React Native, Flutter/Dart, D3.js
- **Top in World** distinction in Cambridge International Mathematics
- **Languages:** (Fluent) English, Urdu, Hindi, Punjabi, (Basic) Arabic, French