

# Zawad Chowdhury

Troy, MI | 586-354-7867 | [zawadchowdhury53@gmail.com](mailto:zawadchowdhury53@gmail.com) | [Website](#) | [GitHub](#) | [LinkedIn](#)

## EDUCATION

### University of Michigan

Ann Arbor, MI

Bachelor of Science in Engineering, Computer Science - GPA: 3.3/4.0

May 2025

- Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics, Applied Linear Algebra, Web Systems, Computer Organization, Database Systems, UI/UX Design, Cybersecurity

### HTD Talent - Full-Stack Java Accelerator Program

Remote

12-week intensive program focused on Java, Spring Boot, and React

Jun 2025 - Sept 2025

## TECHNICAL SKILLS

**Languages:** Java, C, C++, Python, JavaScript, TypeScript, SQL, HTML, CSS, Rust

**Frameworks & Libraries:** Spring Boot, React.js, Node.js, Express.js, Next.js, Vue.js, Flask, FastAPI

**Tools & Technologies:** Git, Neon DB, Vercel, LLDB, AWS, Docker, Figma, Microsoft Office

## PROJECTS

### Free Eats Web Application

Troy, MI

Java, MySQL, TypeScript, React, Bootstrap CSS, WebSocket API

Sept 2025

- Led development for a full-stack food donation coordination platform, building the backend in Java Spring Boot with JDBC and writing unit/integration tests that covered 80% of use cases.
- Designed and implemented a role-based security system with JWT authentication, giving restaurant owners, pantry owners, and volunteers tailored access and functionality.
- Built a responsive React frontend styled with Bootstrap CSS, fully integrated with the Spring Boot API to enable real-time listing, claiming, and tracking of food donations.
- Architected and optimized the MySQL database schema, deployed the application on AWS EC2, and implemented WebSocket messaging to provide instant updates on food availability

### NBA Player Stocks Web Application

Troy, MI

React, Firebase (NoSQL), Node.js, JavaScript, Tailwind CSS

May 2025 - Sept 2025

- Engineered a full-stack web platform simulating a stock market for NBA players, implementing dynamic pricing algorithms driven by real-time performance data for 200+ players.
- Developed a modular React frontend with reusable, responsive components optimized for mobile.
- Built RESTful Node.js services integrated with Firebase Firestore (NoSQL) for real-time portfolio synchronization and Firebase Auth for secure authentication.

### YouTube Playlist Downloader Web Application

Troy, MI

Python, React.js, FastAPI

Apr 2025

- Built a full-stack web app using React and FastAPI to download entire YouTube playlists as MP4 or MP3 files, integrating yt-dlp to process up to 100+ videos per request.
- Designed RESTful endpoints with input validation and error handling, enabling concurrent downloads and reducing average playlist processing time by 40%.

### Sports Court Mobile Application

Ann Arbor, MI

TypeScript, React Native, Node.js, Express.js, PostgreSQL

Jan 2025 - Apr 2025

- Led end-to-end development of a React Native and Node.js mobile app connecting students for local campus sports games, increasing user engagement by 25% within the first month.
- Built and optimized the Express.js backend with PostgreSQL, hosted on Neon DB, to handle 500+ concurrent users, enabling game creation and search functionality.
- Designed a user-friendly UI in Figma and React Native, achieving a 90% positive feedback rating for usability and accessibility.