

Mohammed Fatheen Ahmed

[331-452-9390](tel:331-452-9390) | textfathcs@gmail.com | [linkedin.com/in/fatheenillinois](https://www.linkedin.com/in/fatheenillinois) | github.com/fatheen

EDUCATION

University of Illinois, Urbana Champaign

Bachelor of Science, Computer Science and Statistics, GPA: 3.85

Champaign, IL

Expected: May 2026

Relevant Coursework: Computer Architecture, Data Structures, Discrete Mathematics, Linear Algebra, Advanced Statistics

SKILLS

Languages: Java, Python, C, C#, C++, JavaScript, SQL, Dart, R, HTML/CSS

Databases and Tools: AWS, Docker, Linux, Tableau, Figma, Photoshop, Premier Pro, Flutter, Google Firebase, VS Code, Git, Vim, Node.js, MySQL

Frameworks and Libraries: React, Pandas, NumPy, TensorFlow, Natural Language Processing (NLP), Unity Engine, Unreal Engine, Scikit learn

Interests: Android App Development, Machine Learning (ML), Artificial Intelligence (AI), Natural Language Processing (NLP), Data Visualization, Frontend Development, Cloud Computing, Data Analytics, UI/UX Design, Game Development, Backend Development, Full Stack Development

WORK EXPERIENCE

APS Data Technologies

Aurora, IL

Software Dev Intern

May 2023 – Aug 2023

- Spearheaded the design and development of a smart city application using **Flutter** and **Dart** for Android, integrating **Firebase** for backend services; enhanced user engagement by 40% by implementing real-time data features.
- Successfully implemented smart parking features across four downtown parking lots, reducing search time by 40%. Utilized **UI/UX Design** principles, **Figma** for dynamic front-end features, and **Amazon Web Services** for scalable cloud infrastructure.
- Collaborated with a team of 10+ local policymakers and engaged over 200 local citizens to develop and roll out innovative app features. Increased app usage by 35% within the first six months through features developed using surveillance footage, and **Natural Language Processing (NLP)** to improve user interactions.

Time Dimension LLC

Naperville, IL

Application Dev Intern

May 2024 – Aug 2024

- Developed an Inventory Management application using **React** and **JavaScript**, integrating **Firebase** for real-time database and authentication services. Streamlined inventory tracking and management processes for small businesses, resulting in a 30% increase in operational efficiency.
- Implemented dynamic and responsive user interfaces using **CSS** and **React** hooks, ensuring a seamless user experience across various devices and screen sizes—Integrated **Chart.js** for real-time data visualization of inventory levels and trends.
- Collaborated with owners of local small business warehouse owners to implement Inventory Management applications and customized QR codes for efficient and readily available shipment statistics.

PROJECTS

BikePath

Personal Project

- Designed and implemented BikePath, a biking navigation app using **React** and **JavaScript**, integrating **OpenRouteService API** for route calculation and **Mapbox** for interactive maps. Utilized **Leaflet.js** for smooth map rendering and dynamic interactions.
- Designed modern, responsive interfaces using **CSS** and integrated real-time location suggestions with **OpenCage Geocoding API**. Developed intuitive navigation components and ensured seamless API integration, resulting in a user-friendly and engaging application.
- Developed functionality for users to store and access favorite biking trails using **React's** state management and local storage. Implemented a user-friendly interface for adding, viewing, and managing favorite routes, enhancing user engagement and retention.

AI Recipe

Personal Project

- Designed and implemented a full-stack web application utilizing **Google Cloud** for secure image storage and **Spoonacular API** to analyze food images, extract ingredients, and provide relevant recipe suggestions.
- Created a robust backend with **Node.js** and **Express** to manage image uploads, interact with external APIs for data processing, and return structured responses to the front-end, ensuring smooth and efficient user interactions.
- Developed a modern and responsive front-end with **React**, featuring an intuitive UI with real-time image preview on upload, and dynamically rendered recipe cards that include images, titles, and nutritional details.

Music Finder

Personal Project

- Developed a music recommendation system leveraging **Python** and **Flask**, processed user input, applied cosine similarity using **Scikit-Learn's** Nearest Neighbors algorithm, and suggested similar songs based on features like followers and popularity from over 1 million tracks.
- Designed and implemented a responsive **React** frontend that allows users to input a song name, interact with the **Flask API** through **RESTful** calls, and dynamically display song recommendations with detailed feedback on song popularity and follower count.
- Integrated **Flask-CORS** for cross-origin requests to enable seamless communication between the **React** front-end and **Flask** backend, ensuring smooth data flow.

AWARDS & CERTIFICATIONS

Certifications: AWS Certified Cloud Practitioner, Vex Certified Robotics Educator, Aquent Gymnasiums UX Fundamentals Cert, Illinois State Scholar