Ansh Patel

anshpa.tel /anshpatelcs

Education

University of Minnesota (B.S. in Computer Science, 3.75 GPA)

(Expected Graduation) May 2026

- Relevant Coursework: Data Structures and Algorithms, Operating Systems, Machine Learning, Database Management Systems
- Clubs: Association for Computing Machinery (ACM), Lettuce Club, Social Coding, App Development Club

Technical Skills

Skills: Python, C++, C, React, React Native, JavaScript, Typescript, Java, HTML/CSS

Technologies: MySQL, MongoDB, Git / GitHub, AWS, Jenkins, Docker, Azure, Next.js, Node.js, FastAPI, Firebase/Firestore, Figma, Flask

Experience

Dow Jones, Software Engineering Intern

June 2024 - December 2024

- Implemented a real-time alert system using AWS Lambda functions written in Python and RSS feeds to deliver immediate Slack notifications for new SEC filings, reducing alert response time by 50%.
- Led the development of an LLM-based editorial assistant to significantly improve the efficiency of journalists' article generation.
- Built real-time alerting tools used company-wide by journalists to get instant notifications of corporate actions.
- Enhanced internal document search capabilities with Semantic Search and Retrieval-Augmented Generation (RAG), increasing search result accuracy by 60% and facilitating quicker decision-making.
- Designed systems to analyze market data and automatically generate company closing stories, reducing manual reporting time significantly and ensuring real-time publication.

Samsung, Software Engineering Intern

June 2023 - Aug 2023

- Enhanced network performance and troubleshooting capabilities for 285 million users by developing thorough diagnostics tools.
- Spearheaded the development of an IoT network topology tool that enhanced diagnostic capabilities by 60%, enabling rapid identification and resolution of consumer network issues, written in Python and C.
- Designed and developed a user-friendly React-based frontend to showcase data retrieved from other Matter-enabled smart devices.

GopherGrades, Developer (umn.lol)

August 2022 - Present

- Developed a grade transparency tool designed to provide students with past grade distributions for classes and professors.
- Serving 3M+ queries, 35k+ unique users, 1.5k+ browser extension downloads every year.

University of Minnesota, Undergraduate Teaching Assistant

January 2025 - Present

• Will assist in the instruction of the Practice of Database Systems course and be responsible for creating and grading homework assignments, and holding office hours.

Technical Projects

Luna

Aly, 1st Place in Education @ HackNYU (github)

Javascript, React Native, Firebase, Apple Maps

- Created a Chrome Extension, website, and iOS app to embarrass the user if they are off task.
- Designed an iOS app using React Native with real-time interaction between app & extension using Firebase.
- Utilized a 90% accurate deep learning model using cosine similarity to scan web pages and detect when a user is off task.

Annote, 1st Place @ HackUlowa (github)

Typescript, React, Python, Whisper, MongoDB, Next.js

- Built a note-taking app and website with speech-to-text recognition models to record and transcribe lectures
- Designed UI with Figma and TypeScript, and built RESTful APIs for note retrieval & upload to MongoDB.
- Awarded Best Accessibility Hack for assisting those with hearing loss, ADHD, and blindness.
- Ability to replay recordings of lectures and view past notes and transcriptions with unique links to share with others.

Electron.js, Next.js, Azure

- Developed a voice assistant system with comprehensive browser control capabilities.
- Implemented real-time speech-to-text recognition using Azure & trained a model to detect wake words.
- Fine-tuned model with training data optimizing performance and accuracy for browser controlling.