

PRAVESH KUNWAR

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EDUCATION

University of Michigan

B.S in Computer Science

Ann Arbor, MI

Expected Graduation: May 2026

- **Courses Taken:** Object-Oriented Programming (C+), Discrete Math, Data Structures and Algorithms, Intro to Computer Organization, Foundations of Computer Science, Web Systems, Software Engineering, Database Management Systems, *Intro to Computer Security, *Human-Centered SW, *Intro to R
- **Involvements:** Michigan Hackers, Michigan Data Science Team (MDST)

EXPERIENCE

Stealth Startup

Co-Founder & Software Engineer

May. 2025 – Present

Remote, United States

- Architected the foundational mobile infrastructure using **Expo** and **Supabase**, implementing **secure authentication**, **real-time database listeners**, and **scalable storage solutions**
- Engineered backend schemas and implemented features like **user onboarding** and **profile management** to support scalable, dynamic social interactions

Michigan Hackers

Web Development Team Lead

Aug. 2024 – Present

Ann Arbor, MI

- Mentored a cohort of **10+ students** in modern web development, teaching a full-stack curriculum featuring **React.js**, **Next.js**, **TypeScript**, **Tailwind CSS**, and **Node.js**
- Built the front-end for an **internship tracker** tool using **React.js** and guided teammates on **Git workflows**, **pull requests**, and **code reviews** to ensure clean, maintainable code
- Developed front-end architecture for a **student-professor networking** platform, implementing **reusable components**, **secure authentication**, and **scalable database integration**

University of Michigan - Information and Technology Services (ITS)

Software Developer Intern

May. 2025 – Aug. 2025

Ann Arbor, MI

- Delivered full-stack improvements on **Remote Office Hours Queue**, a platform supporting virtual student sessions. Implemented a **real-time announcement system** using **WebSockets**, enhanced **backend search logic** to streamline instructor workflows, improved Zoom meeting flows, and added **70+ Jest-based tests** to ensure robust front-end reliability
- Modernized the **Canvas Course Manager** tool by integrating **Google Analytics** to track user behavior, expanding and fixing **unit test coverage**, upgrading key **backend dependencies**, and improving **internal documentation**
- Developed a **UM-Maizey bot** using **Streamlit** to **automate API discovery** from the University's directory, indexing **50+ public APIs** to help developers quickly identify and integrate the most relevant endpoints, including sampled OAuth calls in **Python** and **Node.js**

Michigan Data Science Team (MDST)

Data Analyst

Jan. 2024 – Apr. 2024

Ann Arbor, MI

- Engineered a data pipeline using **Python**, **pandas**, and **Spotipy** to process a dataset of **3,000+ songs** from Spotify history, generating **distinct interactive visualizations** that revealed key trends in **genre preferences** and **listening time habits**
- Implemented a **collaborative filtering algorithm** based on **user similarity** to generate **25+ personalized**, **high-affinity song recommendations**, achieving an **80% match rate** with user listening preferences during validation

PROJECTS

gemrag | *Python, LangChain, Flask, Google Generative AI, Chroma, PyPDFLoader, pdf2image, PIL, SQLite*

- Engineered a **full-stack, multimodal RAG application** using **LangChain** and **Google Gemini**; built a **Flask** UI and integrated **ChromaDB** for **persistent vector storage**, enabling **parallel processing** and efficient conversational Q&A over **1000+ page PDFs** combining both text and image data

invently.ai | *TypeScript, React.js, Python, Node.js, Vite, Flask, Supabase, CSS, MUI, Stripe/Gemini API, Chart.js*

- Architected a full-stack inventory management platform to provide **AI chat-powered prediction** using **Google Gemini** and **real-time sales analytics** with chart visualizations, utilizing a **React.js** front-end and a **Python (Flask)** backend

ultimatum | *TypeScript, React.js, Next.js, Node.js, MUI, Discord.js API, MongoDB, Mongoose, Axios*

- Developed and deployed a highly customizable Discord bot **deployed in 15+ active servers at peak activity**, offering **20+ interactive commands** including moderation tools, search utilities, and developer features. Designed scalable command handling using modular components and **MongoDB-backed** configuration

ineed.io | *TypeScript, React.js, Node.js, Next.js, Vercel, Supabase, Figma, Tailwind CSS, shadcn/ui*

- Spearheaded the full-stack development of an "Internship Tracker" **used by 50+ active students**, featuring a centralized dashboard, interview prep tools, and gamified progress tracking
- Engineered a responsive and accessible UI with Tailwind CSS and shadcn/ui, leveraging **Supabase** to deliver **real-time data synchronization** for live leaderboards and user updates

TECHNICAL SKILLS

Languages: HTML, CSS, JavaScript, TypeScript, Python, C, C+, SQL

Frameworks/Technologies: React.js, React Native, Expo, Next.js, Node.js, Vite, Flask, Django, GraphQL, Tailwind CSS, Material UI, MongoDB, Supabase, Firebase, SQLite, MySQL

Tools & Platforms: Git, GitHub, VS Code, Linux/Unix, Streamlit, Figma, AWS, Docker, Vercel, Heroku