Pravesh Kunwar

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EDUCATION

University of Michigan

Ann Arbor, MI

B.S in Computer Science

Expected Graduation: May 2026

• Courses Taken: Calculus I, Calculus II, Object-Oriented Programming (C++), Discrete Math, Programming and Intro Data Structures, Data Structures and Algorithms, Intro to Computer Organization, Foundations of Computer Science, Web Systems, Software Engineering, Database Management Systems

TECHNICAL SKILLS

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

Frameworks/Technologies: React.js, Next.js, Node.js, Vite, Flask, GraphQL, Tailwind CSS, Sass, Material UI, Bootstrap,

MongoDB, Supabase, Firebase, SQLite, MySQL, Redux, Docker **Developer Tools**: VS Code, GitHub, Vercel, AWS, Heroku, Figma

EXPERIENCE

Michigan Hackers

Aug. 2024 - Present

 $Web\ Development\ Team\ Lead\ --\ Software/Lead\ Developer\ --\ Core\ Member$

Ann Arbor, MI

- Taught 10+ students the fundamentals relating to fullstack, covering React.js, TypeScript, Next.js, CSS, user authentication and database management, etc. Oversaw projects, tracked attendance, delivered weekly presentations, and encouraged a collaborative environment.
- Guiding students through hands-on projects by introducing concepts like responsive design, basic API integration, and debugging techniques, fostering collaborative skills and ensuring foundational understanding of web development principles.
- Led two sub-teams developing interconnected platforms: a React/TypeScript networking platform connecting UMich students/professors for research (overseeing development, collaboration, and feature integration) and a gamified internship tracker empowering students in their job search.

Michigan Data Science Team

Jan. 2024 – Apr 2024

Data Analyst

Ann Arbor, MI

• Leveraged Spotify's API and Python libraries (Matplotlib, NumPy, Pandas) to analyze user listening patterns, visualize trends in top artists/tracks, and build interactive dashboards that enhance music discovery through data-driven insights, allowing users to gain a deeper understanding of their music habits.

PROJECTS

 ${\bf Ineed.io} \mid \textit{TypeScript}, \textit{React.js}, \textit{Node.js}, \textit{Next.js}, \textit{Vercel}, \textit{Supabase}, \textit{Figma}, \textit{Tailwind CSS}, \textit{shadcn/ui}$

GitHub

- Lead the design and development of an "Internship Tracker" platform, empowering students to effectively manage their internship applications, track progress, and optimize their job search strategy through personalized reminders, intelligent internship suggestions, and comprehensive performance analytics.
- Designed and implemented core features including a centralized application dashboard, interactive progress visualizations (GitHub-style graphs), interview preparation tools, and gamified elements (leaderboards, KD ratio) to enhance user engagement and streamline the internship application process.

findBlue | TypeScript, React.js, Node.js, Next.js, Vercel, Supabase, CSS, MUI

GitHub

- Initiated the development of a networking platform that empowers University of Michigan students and professors to discover and share opportunities for research, projects, internships, and collaborations.
- Engineered a responsive frontend with React.js and integrated a secure login system, enabling seamless user interactions such as creating profiles, browsing proposals, and managing saved or posted opportunities.
- Leveraged Supabase to design and maintain scalable data storage solutions, integrating critical features like proposal management, profile systems, and progress tracking to enhance user engagement and streamline project workflows.

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

- Built a robust full-stack inventory management platform by combining Flask for backend services and React.js with TypeScript for the frontend. Delivered essential features like real-time analytics, sales trend tracking, and AI-driven inventory predictions to empower users with actionable insights.
- Incorporated Stripe's API for flexible subscription management and secure payment processing, and Google Gemini's API to introduce AI-powered interactions that simplified decision-making and enhanced the overall user experience.
- Created dynamic, interactive data visualizations with Chart.js to showcase product history and inventory trends. Using Supabase for real-time updates and efficient database management, easily enables users to monitor changes and make informed decisions quickly.

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

GitHub

- Engineered a comprehensive Discord bot using Discord.js, leveraging MongoDB for database management to store user preferences, server settings, and command configurations. Commands ranged from moderation to interactive and "fun" style commands
- Designed robust database models to ensure efficient data retrieval and updates, enabling features like customizable moderation tools, developer utilities, and real-time server analytics.

GemRag | Python, LangChain, Google Generative AI, Chroma, PyPDFLoader, pdf2image, PIL, SQLite

<u>GitHub</u>

- Developed an AI-powered document assistant using Python, LangChain, and Google Generative AI, enabling precise querying of PDF content with Chroma vector storage and OCR support via PyPDFLoader and UnstructuredPDFLoader.
- Created advanced multimodal functionality by integrating pdf2image and PIL to extract and process images from PDFs, combining text and visual analysis with Concurrent Futures for efficient parallel execution, enhancing more precise and quick responses.