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

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

Ann Arbor, MI

- Led weekly sessions for 10+ students on full-stack development, covering React.js, TypeScript, Next.js, CSS, user authentication, and database management. Tracked attendance, delivered presentations, and fostered a collaborative learning environment.
- Introduced students to real-world web development concepts, including responsive design, API integration, and debugging techniques, ensuring a strong foundation through hands-on projects.
- Led two sub-teams developing interconnected platforms— a React/TypeScript networking platform connecting UMich students and professors for research and a gamified internship tracker to help students navigate job applications. Oversaw development, collaboration, and feature integration for both projects.

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

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

GitHub

- Lead the development for an "Internship Tracker" platform using TypeScript, React.js, Next.js, and Node.js, enabling students to efficiently manage internship applications, while tracking progress with personalized reminders and performance analytics.
- Implemented key features, including a centralized application dashboard, GitHub-style interactive progress visualizations, and interview preparation tools. Integrated gamification elements such as leaderboards and KD ratios to enhance user engagement. Utilized Tailwind CSS, shadcn/ui, and Figma for a modern, intuitive UI/UX design, and Supabase for real-time updates and scalable storage.

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

GitHub

- Integrated a full-stack networking platform for University of Michigan students and professors using React.js, Next.js, and Supabase, enabling seamless discovery and sharing of research, project, and collaboration opportunities through dynamic user profiles, proposal management, and real-time data storage.
- Implemented a scalable backend using Supabase for real-time data storage and secure user authentication, enabling seamless proposal management and enhancing user engagement through a modern, responsive UI built with Material UI.

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

- Built a full-stack inventory management platform using Flask (backend) and React.js with TypeScript (frontend), featuring real-time analytics, sales trend tracking, and AI-driven inventory predictions for actionable insights. Integrated Stripe for secure payments and Google Gemini for AI-powered interactions.
- Developed interactive data visualizations with Chart.js and implemented Supabase for real-time updates, enabling seamless
 inventory tracking and data-driven decision-making.

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

GitHub

- Developed Ultimatum, a feature-rich Discord bot using Discord.js and MongoDB, enabling server moderation, developer utilities (e.g., GitHub profile lookup, Discord.js documentation), and interactive commands (e.g., Google search, polls) with per-server customization for users.
- Designed scalable database models for efficient storage and retrieval of user preferences, server settings, and command
 configurations, supporting real-time analytics, moderation tools, and customizable features like prefix management and
 suggestion channels.

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

 $\underline{ ext{GitHub}}$

- Developed an AI-powered document assistant using Python, LangChain, and Google Generative AI, enabling precise querying of PDF content through Chroma vector storage and OCR integration. Enhanced system efficiency by using Concurrent Futures for parallel processing of text and image extraction via pdf2image and PIL.
- Designed and deployed a simple Flask-based web interface for seamless PDF uploads and real-time querying, combining multimodal text and visual analysis for accurate, context-aware responses.