Pravesh Kunwar

248-767-2467 | praveshk@umich.edu | praveshk.app | linkedin.com/in/praveshkunwar | github.com/PraveshKunwar

Education

University of Michigan Ann Arbor, MI

B.S in Computer Science *Expected Graduation: May 2026*

- 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, Informational Retrieval and Web Search

Technical Skills

Languages: HTML, CSS, JavaScript, TypeScript, Python, C, C++, SQL
Technologies: React.js, Next.js, Node.js, Flask, Vite, MongoDB, Supabase, Jupyter Notebook, Git, Vercel, vscode
Certifications: JavaScript, Problem Solving Beginning & Intermediate (HackerRank); Scientific Computing, Machine Learning, Python (Kaggle, freeCodeCamp); Joy of Coding (University of Michigan)

Experience

Michigan Data Science Team Jan. 2024 – Apr 2024

Data Analyst *Ann Arbor, MI*

- Utilized Spotify's API to analyze user data, uncovering trends like top artists, favorite tracks, and listening patterns, providing actionable insights to enhance the music discovery experience.
- Constructed dynamic and visually compelling dashboards using Matplotlib, NumPy, and Pandas, empowering users to interact with detailed analytics and gain a deeper understanding of their music habits.

Michigan Hackers Jan. 2025 – Present

Web Develpoment Team Lead *Ann Arbor, MI*

- Teaching a group of 30+ students on the fundamentals of web development, including HTML, CSS, JavaScript, and basics of React.JS and Node.JS. Responsibilities include managing and overlooking projects, taking attendance, presenting slides, etc.
- 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.

Michigan Hackers - Advanced Web Development Team Aug. 2024 – Present

Software/Lead Developer & Core Member *Ann Arbor, MI*

- Led a team within the Advanced Web Development Team to architect a scalable networking platform utilizing React.js and TypeScript. Oversaw key development tasks, facilitated team collaboration, conducted code reviews, and ensured seamless integration of features authorizing University of Michigan students and professors to connect for research and projects.

Projects

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.

playlistly | *TypeScript, React.js, CSS, MUI, Vite, Python, Flask, Spotify's API* **GitHub**

- Developed a full-stack web application leveraging Flask for the backend and React.js with TypeScript for the frontend to interact with the Spotify API, enabling users to generate personalized playlists based on their favorite artists and top tracks.
- Built a secure user authentication system using Spotify OAuth2, implemented efficient backend logic to process artist data and handle API requests, and developed a dynamic frontend with Vite and Axios to display playlist links and manage user interactions seamlessly.

invently.ai | *TypeScript, React.js, Vite, Python, 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.

logify | *Python, Flask, Flask-Mail, Flask-Limiter, itsdangerous, pyotp, Bootstrap* **GitHub**

- Designed a secure passwordless authentication system using Flask, integrating Flask-Mail for email delivery and pyotp for generating time-sensitive one-time passwords (OTP) to enable multi-factor authentication. Utilized itsdangerous for creating tokenized login links, ensuring robust security and providing a seamless user login experience.
- Incorporated Flask-Limiter to implement rate-limiting and prevent abuse, styled the frontend with Bootstrap for a responsive and modern user interface, and leveraged the Gmail SMTP server for reliable email communication. Combines advanced security practices with an intuitive design to enhance user authentication workflows.