

SAWAN RIJAL

Full-Stack Developer | Applied Computer Science Graduate

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[Personal Portfolio](#) | [LinkedIn](#) | [GitHub](#)

SUMMARY

A results-oriented full-stack developer with a Bachelor's in Applied Computer Science from the University of Winnipeg. Strong foundation in modern web technologies and full development lifecycle, from building RESTful APIs to designing responsive UIs with React and Tailwind. Adept at writing clean, maintainable code and deploying scalable solutions.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Java, Python

Frontend: HTML, CSS, Tailwind CSS, React.js, Next.js

Backend: Node.js, Express.js

Databases: PostgreSQL, MongoDB

Other: REST APIs, Git, Agile, Responsive Design, Data Structures & Algorithms

PROFESSIONAL EXPERIENCE

Direct Support Professional

Pulford Community Living Services | Winnipeg, MB June 2022 - Present

- Provided essential care to individuals with diverse needs, fostering a supportive and safe environment.
- Supported mobility, exercise, and personal care routines to enhance quality of life.
- Maintained precise documentation and collaborated with interdisciplinary teams.
- Demonstrated reliability, compassion, and strong communication in high-responsibility situations.

PROJECTS (Featured on my portfolio website.)

Ecom – E-commerce Platform

- Built a full-stack ecommerce platform using Next.js 14, TypeScript, and PostgreSQL with Prisma ORM, featuring product catalog, shopping cart, and secure checkout functionality
- Integrated Stripe payment processing with webhook handling and implemented optimized database storage to overcome API metadata limitations (reduced payload from 1100+ to <50 characters)
- Developed responsive admin dashboard with CRUD operations for product management, order tracking, and real-time inventory updates using modern React patterns and Tailwind CSS
- Implemented secure authentication and data validation with proper error handling, transaction rollbacks, and automated cleanup processes to ensure data integrity across payment flows

LensBook – Social Media App

- Built a full-stack social media platform using Next.js 15, TypeScript, and Prisma ORM with PostgreSQL, featuring real-time messaging, photo sharing, and social interactions with 75% reduced database queries through intelligent caching and polling optimization
- Implemented comprehensive real-time messaging system with WebSocket-like polling, read receipts, message editing/deletion, and browser push notifications, supporting 600+ API requests per hour per user with smooth Instagram-like UI animations using Framer Motion
- Developed advanced notification system with browser push notifications, real-time updates, and intelligent permission management, integrating Clerk authentication and creating responsive mobile-first design with SSR compatibility
- Architected scalable database schema with optimized queries, connection pooling, and smart caching strategies, while implementing features like follower systems, comment threads with replies, and real-time activity feeds with performance monitoring

Podcaster – AI Podcast Generator

- Developed an AI-powered podcast app using OpenAI APIs to convert written content into realistic audio.
- Leveraged Convex backend and Clerk for user authentication and real-time data handling.

- Built a modern, intuitive interface with Next.js to manage audio content, transcripts, and episode generation.

EDUCATION

Bachelor of Applied Computer Science (Co-op)

University of Winnipeg | 2022 - 2025

Relevant Coursework: Data Structures, Algorithms, Software Development, Web Design, DBMS, OOP, Project Management.