

# SAWAN RIJAL

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Full-Stack Developer | Applied Computer Science Graduate

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

## SUMMARY

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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.

## EDUCATION

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BSc. Applied Computer Science

University of Winnipeg | 2022 - 2025

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

## TECHNICAL SKILLS

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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

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## 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.)

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### 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

### StoreIt- SAAS Cloud Storage App

- Built a full-stack cloud storage platform using React.js, Node.js, Express, and PostgreSQL with Prisma ORM, implementing secure file upload/download, folder management, and real-time storage tracking with dynamic user dashboards.
- Integrated Stripe payment processing and Backblaze B2 cloud storage to create a scalable SaaS solution with tiered subscription plans (FREE/PRO/BUSINESS), automated webhook handling for billing events, and plan-based storage/upload limits (500MB to 1TB).
- Developed responsive file management system with drag-and-drop uploads, real-time progress tracking, file sharing capabilities, and mobile-optimized UI featuring grid/list views, search functionality, and breadcrumb navigation.
- Implemented robust authentication and deployment pipeline using JWT tokens, bcrypt password hashing, Railway cloud deployment, and comprehensive error handling with automated storage limit enforcement and database consistency checks.

### Phantom Driving School - Business Management Platform

- Built a comprehensive driving lesson management system using Next.js, TypeScript, Prisma ORM, and PostgreSQL, featuring admin dashboard with real-time analytics, student progress tracking, and automated lesson scheduling.
- Integrated Stripe payment processing with refund capabilities and NextAuth authentication to create scalable business solution with booking management, package tracking, and revenue analytics with daily/weekly reporting.
- Developed responsive multi-role interface with lesson package management, student review system, service configuration, and real-time progress tracking with animated progress bars and drag-and-drop functionality.
- Implemented robust admin controls using TypeScript for type safety, Framer Motion animations, comprehensive CRUD operations, and advanced filtering/pagination with automated notifications and data export capabilities.