

# KANWALJOT SINGH

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Aspiring Full-Stack Developer with hands-on experience in building scalable web applications using Next.js, TypeScript, and PostgreSQL. Skilled in developing RESTful and serverless APIs, implementing secure authentication with NextAuth.js and bcrypt, and managing CI/CD pipelines with Docker and GitHub Actions. Strong collaborator with a foundation in Agile development and a passion for creating efficient, user-focused software solutions.

## Experience

### IT Support Assistant | Dasmesh Public School, Faridkot, India

(Sept 2021 – May 2023)

- Resolved 100+ technical issues across Windows OS, Office 365, and networks with a 95% resolution rate, minimizing downtime for staff and students.
- Supported 200+ users by troubleshooting hardware, Wi-Fi, and Google Workspace, enhancing reliability and user satisfaction.
- Automated device setup and authored 15+ guides, streamlining onboarding and reducing preparation time by 40%.

## Projects

### Flopay | Next.js, TypeScript, PostgreSQL, Prisma, NextAuth.js, Turborepo, Docker, CI/CD

[Live Demo](#)

- Built a monorepo-based microservices architecture using Turborepo with shared UI components and database clients for efficient development.
- Implemented secure authentication via NextAuth.js and bcrypt, validated with Zod schemas for data integrity and access control.
- Developed serverless API routes with SQL triggers for real-time synchronization and transparent transaction reporting.
- Automated testing and deployment using Docker and GitHub Actions, improving release speed and CI/CD reliability.

### Maple Mover | Python, Streamlit, NextBus API, Plotly, pytest, Docker

[Live Demo](#)

- Built an interactive analytics dashboard using Streamlit and Plotly to visualize live transit data from the NextBus API, enabling data-driven route monitoring and performance tracking.
- Integrated Nominatim geocoding and automated validation pipelines to ensure precise mapping accuracy and maintain data consistency across dynamic updates.
- Optimized API refresh rates with asyncio and concurrent processing to reduce latency and improve responsiveness.
- Deployed with Docker for reproducible builds and implemented pytest test suites to verify API reliability and end-to-end data quality.

### Serenity | Next.js 15, React 19, Firebase, Firestore, Tailwind CSS, Spotify Web API

[Live Demo](#)

- Developed a real-time collaboration and music-sharing platform using Next.js 15 App Router and Firebase Authentication, providing synchronized, low-latency experiences across multiple devices.
- Integrated Socket.IO and the Spotify Web API to enable live messaging, shared playlists, and cross-user music discovery within dynamic session rooms.
- Designed modular interfaces with shadcn/ui and Tailwind CSS, focusing on reusable components, visual consistency, and accessibility across screens.
- Managed state with context-based logic and optimized Firestore queries to enhance user experience.

## Education

### Seneca Polytechnic

(Sept 2023 – Present)

- Computer Programming and Analysis Diploma

## Skills

- Languages & Frameworks:** TypeScript, JavaScript, Python, SQL, C++, Next.js, React.js, Node.js
- Backend & Databases:** Prisma ORM, PostgreSQL, RESTful & Serverless APIs, Microservices Architecture
- Authentication & Security:** NextAuth.js, OAuth 2.0, bcrypt, Zod Schema Validation
- DevOps & Testing:** Docker, GitHub Actions (CI/CD), Linux, Git, pytest, AWS
- Frontend & Collaboration:** Tailwind CSS, shadcn/ui, Recoil, Figma, Agile Development