MANYUVRAJ SINGH SANDHU

FULL STACK DEVELOPER

manyuvraj.sandhu@gmail.com +1-(519)-722-9376 manyuvraj-sandhu manyuvraj-sandhu

EDUCATION

University of Waterloo, Waterloo, ON
Bachelors of Mathematics in Computational Mathematics, Minor in Computing
Dean's Honours List, 6 Term Distinction
Relevant Coursework: Data Types and Structures, Numerical Computation, Logic and Computation, Linear Algebra, Discrete Math, Probability & Statistics, Object Oriented Software Development, Algorithms, Micro/Macro-economics, Data-intensive distributed analytics, Statistical Classification, Data Science

SKILLS

Languages: • Python • JavaScript • TypeScript • HTML • Julia • C++ • C • CSS • SQL • Java • R • Racket • Bash • Elixir • Scheme • Ruby • Go

Tools: • Git • React • Node.js • Next.js • Docker • RESTful APIs • Supabase • Amazon Web Services (AWS) • Tailwind • n8n • PostgreSQL • Stripe • Django • Android Studio • Google Cloud • Ethereum Blockchain

Soft Skills: • Adaptability • Communication • Creativity • Interpersonal Skills • Leadership • Problem Solving • Team Management • Team-worker • Time Management • Working Under Pressure

EMPLOYMENT

Dasens AI, Full Stack Developer Calgary, AB Jan 2025 – Present
- Led full-stack development of AI-driven web applications, SmartSRED and InventGenie, using Next.js, TypeScript, Tailwind CSS, and HTML, delivering responsive, production-ready interfaces that enhanced user engagement and client satisfaction
- Engineered and automated backend workflows using n8n and embedded dynamic Airtable dashboards, streamlining client operations and improving data visualization capabilities
- Integrated Supabase for user authentication and Stripe for secure payment processing, delivering a seamless and secure user experience that supported scalable growth
- Optimized website performance by refining site architecture and applying SEO strategies, leading to improved load times and increased organic traffic
- Utilized Supabase with PostgreSQL for data storage and management, ensuring application scalability, data integrity, and reliable backend operations

IC Controls, Embedded Systems Developer Orangeville, ON May 2024 – Aug 2024
- Developed software using Python for a digital process water analyzer, enabling accurate multi-input, multi-parameter measurements of pH, DO, and ORP sensors, improving data precision
- Enhanced user interfaces with Python and Raspberry Pi by leveraging Linux administration and SQL, streamlining operations and boosting system responsiveness
- Strengthened data security and product integrity by implementing code obfuscation techniques, reducing the risk of reverse engineering
- Improved code quality and efficiency by participating in daily code reviews and optimizing Python, Linux, and C++ components across the platform
- Provided data-driven insights for hardware optimization by graphing and analyzing EMI effects on sensor boards using Python

University of Waterloo, Software Developer Waterloo, ON Sept 2023 – Dec 2023
- Developed a scheduling optimization model using Julia and Bash scripts, improving company schedule efficiency and reducing planning time.
- Enhanced shipping decision-making by refining the model to factor in cost, availability, and operational efficiency, leading to more cost-effective logistics.
- Resolved tray order sequencing issues, increasing scheduling accuracy and minimizing operational delays.
- Collaborated regularly with company staff to identify workflow challenges, integrating feedback to drive continuous process improvements.
- Iteratively refined optimization models, resulting in smoother scheduling workflows and measurable gains in overall productivity.

d1g1t Inc., Associate Software Engineer Toronto, ON Sept 2021 – Aug 2023
- Updated client drivers and base code, completing Jira tickets related to data-loader tasks using Python, Bash scripts, and HTML, improving integration reliability and task turnaround time
- Managed client databases with PgAdmin and Amazon Web Services (AWS), strengthening SQL proficiency and ensuring data integrity and availability
- Leveraged AWS services, including EC2 and S3, to execute client-data updates and refreshes, and streamlined deployment processes using Jenkins
- Analyzed system performance metrics with DataDog to proactively identify inefficiencies, reducing downtime and enhancing system stability
- Automated repetitive operational tasks by developing RunDeck Jobs with integrated SQL, Python, and Bash scripting, improving workflow efficiency
- Collaborated with cross-functional teams to resolve client issues, ensuring seamless integration and maintaining high client satisfaction

PROJECTS

MyPagefolio Mar 2025
- Developed a full-stack web application using Next.js and Supabase (PostgreSQL) for data storage and authentication, integrating Stripe for secure payment processing, enabling students to create online portfolios from their resumes with AI-powered insights and suggestions to enhance their profiles

SaaS AI Platform Oct 2024
- Developed a 5-tool AI SaaS platform using Next.js 13 App Router, integrating React, Tailwind, Prisma, MySQL, and Clerk to deliver a user-centric experience, and implemented a seamless Stripe subscription system to automate billing and enhance platform functionality

Full-Stack e-Commerce Application Aug 2024
- Developed a full-stack e-commerce application with an admin dashboard and CMS using Next.js 13 App Router, React, Tailwind, Prisma, MySQL, and NextAuth
- Implemented complex client-side routing, user authentication, and seamless navigation. Key features included product and order management, dynamic forms, data tables, Stripe integration, and dark mode. Deployed the application on Vercel

AI Article Summarizer Oct 2023
- Built an Article Summarizer Application using OpenAI's GPT model powered by React, JavaScript, Tailwind CSS, Vite, and Redux Toolkit

Spotify Clone Sept 2023
- Developed a full-stack "Spotify Clone" using Next.js 13.4 App Router, React, Tailwind, Supabase, PostgreSQL, and Stripe
- Implemented features like song upload, playlist creation, and Stripe integration for monthly subscriptions. Ensured responsiveness across devices, deployed using Vercel

Shuffle Master for Android Dec 2022
- Built a music application, with a modern and smooth working user interface
- While shuffling the saved playlist, playback count, average playing duration, genre and artist are taken into consideration such that the very next song in the queue after the shuffle is the song which the user would like to listen to the most