

Pravine Manivannan

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EDUCATION

McMaster University

Candidate for Bachelor of Computer Engineering and Management (Co-op)

Hamilton, ON

September 2019 - Apr 2025

- Currently maintaining a cumulative GPA of 3.5/4.0

EXPERIENCE

Mobile Developer

Sept 2024 – Dec 2024

Fixvi (Best Pitch @ Invest Ottawa Ignition Cohort 24) — Part-time

Ottawa, ON

- Implemented an automated scheduling feature using Sendbird in React Native, integrating webhooks, bot-driven prompts, interactive polls, and backend APIs to streamline user scheduling workflows.
- Led the porting of a React Native codebase to Android by analyzing platform-specific requirements, modifying native code, and optimizing Gradle configurations to ensure compatibility with the latest Android firmware, expanding the app's reach to Android users and enhancing accessibility across multiple platforms.
- Implemented push notifications using Customer.io as the central service to manage Firebase Cloud Messaging (FCM) for Android and Apple Push Notification Service (APNs) for iOS by configuring backend workflows and integrating client-side logic, ensuring seamless real-time updates and improving user engagement by 40%.

Fullstack Developer

May 2024 – Sept 2024

Imprimo (Funded by Canadian Council for the Arts) — Co-op

Toronto, ON

- Implemented a custom stories feature in React Native by developing modular components and RESTful Node.js API endpoints, enabling content posting, editing, and management, leading to a 50% increase in content contributions
- Created PostgreSQL database migrations by analyzing schema requirements and writing optimized SQL scripts, ensuring efficient data storage and retrieval, which reduced query response times by 30%
- Developed and integrated a scalable real-time chat platform using PubNub's publish/subscribe model within a React Native app, ensuring instant message delivery and reliable communication across devices.
- Designed and developed responsive React wireframes by collaborating with stakeholders and applying UI/UX best practices, enhancing cross-device compatibility and increasing average session duration by 60%

5G Software Engineer

May 2022 - Dec 2022

Ericsson — Co-op

Ottawa, ON

- Developed and implemented features in DUCP-Carrier Aggregation to ensure signals were passed seamlessly by leveraging GO; Increased mid-band coverage by 250% in coordination with Cloud RAN Microservices
- Performed synchronization of micro-services on production code updates; leveraged GCOV's testing framework together with Jenkins pipelines all while ensuring >90% code-coverage using Sonarqube.

PROJECTS

Threads Clone | Personal Project | *Next, TypeScript, Tailwind, MongoDB, Clerk* 🌐 🌐

- Developed a web version of the social networking platform Threads
- Used NextJS with Typescript to take advantage of server-side rendering, improving performance by 30-50%
- Utilized Clerk authentication to provide a secure and user-friendly sign-on and login experience.
- Developed a REST API in NextJS with MongoDB for operations like posting, editing, and deleting threads.

PriceScraper | Personal Project | *Next, Tailwind, MongoDB, Cheerio, Puppeteer* 🌐 🌐

- Developed a web-scraper to monitor and compare prices of products across Amazon.
- Utilized Puppeteer for web scraping in order to fetch real-time pricing data, and implemented a user-friendly interface using Tailwind CSS for easy navigation and monitoring.
- Employed Cheerio for parsing HTML, reducing extraction times by 50% and making the extraction process data efficient and straightforward.

TECHNICAL SKILLS

Languages: Java, C/C++, Go, Python, HTML, CSS, TypeScript, Node, Assembly, MATLAB, Simulink, Verilog

Technologies/Frameworks: Next.js, React, MongoDB, Express, Tailwind, REST, gRPC, Clerk, Docker, OAuth,

Framer Motion, Tkinter, PySerial, Git, GitHub, AWS (S3, EC2, DynamoDB), Quartus, ModelSim, Figma, Adobe Suite

Methods: Responsive Design, OOP, Functional Programming, Embedded Systems Programming, SEO, Project

Ownership, Cross-Functional Collaboration, CI/CD, Unit Testing & Performance Tuning, Communication Skills &

Presentation, Version Control, Full Stack Development, Networking, Documentation, Data Structures & Algorithms.