

Pratham Sitoula

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EDUCATION

University of Alberta

Bachelor of Science in Software Engineering Co-op

Edmonton, AB

September 2020 – June 2025

EXPERIENCE

Systems Analyst Intern

Alberta Newsprint Company

January 2023 – September 2023

Whitecourt, AB

- Helped save **\$100,000** in HxGN EAM licensing fees by enabling employees to submit purchase requisitions externally, utilizing SOAP requests to integrate these requisitions into the EAM system.
- Assisted in the efficient maintenance of **40+** servers, ensuring optimal system performance and reliability.
- Implemented **25+** workflows for the transfer of data between different systems, enhancing data accuracy and efficiency in daily operations.

PROJECTS

HomeTrack App

October 2023 - Present

- Designed and developed a user-friendly **Java** Android application for household inventory management. Users are able to filter items, sort items, create tags to categorize items, add new items, take images, and scan images for serial number.
- Utilized **Firestore** as the database to securely store and manage user information, and **JUnit** for unit testing to ensure the reliability of the application.
- Streamlined project workflow with **Kanban**, and used **Figma** for UI mockups and storyboard sequences.

FitTrack

September 2023 - October 2023

- Developed a comprehensive Fitness Tracking application using **React**, **Express**, and **MongoDB**, offering users the ability to manage exercises, manage information, and track weight.
- Implemented role-based access control, granting admin users access to an admin page for viewing total users and exercises.
- Ensured secure user interactions by effectively managing login state and route protection through the use of cookies.

Purchase Requisition Form

July 2023 - September 2023

- Designed a form using **Python** and **JavaScript** in **Frappe** for employees to submit purchase requisitions.
- Implemented web hooks, where submitted forms are sent to **NeuronESB** for data parsing with **C#**. Afterwards, SOAP XML and **SQL** queries are created to interact with HxGN EAM.
- Implemented email notifications, ensuring that employees are promptly informed of the status changes in their purchase requisitions.

Navigation System

April 2022 - May 2022

- Implemented a navigation system using **C++** that enables users to navigate around the map of Edmonton, select their desired start and end points for a trip.
- The route-finding server computes the shortest path between the two points (or the nearest points to them in the road network) using Dijkstra's algorithm. It then returns the route information, including coordinates of waypoints along the shortest path, to a plotter program.
- Facilitated inter-process communication (IPC) between the plotter program and the route-finding server through a pair of pipes.

TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript, C#, SQL, TypeScript, HTML/CSS

Frameworks/Libraries: React, Express, MongoDB, Next, Firestore, Sass, Tailwind, Redux, JUnit, Frappe

Tools/Platforms: Docker, Kubernetes, Android Studio, UML, Figma, Kanban, NeuronESB