

## TECHNICAL SKILLS

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**Languages:** C/C++, Python, BASH, HTML, JavaScript, CSS, Go, Ruby, Racket, Haskell

**Tools:** Git, Heroku, GCP, Firebase, Visual Studio, Xcode, Android Studio, Qt

**Database:** MySQL, SQLite3, PostgreSQL, NoSQL

**Frameworks:** React, React Native, Flask, Node.js

**Operating Systems:** Windows, Mac OS, Linux

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## CO-OP EXPERIENCE

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### Software Development Engineer (July 2021 – April 2022)

#### Safronica Ltd. (Stealth mode startup).

- Worked as Mobile Application Programmer and was involved in diverse development platforms which include **iOS** and **Android**, using **React Native** and **Firebase**.
  - Developed promotional web pages to advertise the app by using **React**.
  - Implemented the complex mobile applications design, and core functionalities.
  - Implemented Python scripts and deployed them to **Google Cloud Virtual Machine** for permanently running and processing data, by which the workload of the app was reduced, and the speedup was achieved.
  - Experienced maintaining/bug-fixing or updating already build.
  - Documented for the product as well as solutions for the team troubleshooting docs. Assisted the manager in creating onboarding tutorials.
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## PROJECTS

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### MyDictlet

A full-stack web application helping English learners build vocabulary

- Created **Python (Flask)** servlets with **RESTful APIs** to handle **HTTP requests and responses**
- Built a **relational database (PostgreSQL)** to store users' data
- Designed an interactive website using **AJAX technology (HTML, JavaScript, CSS)**
- Deployed it on **Heroku**. Implemented the deployment workflow using **Heroku pipelines**

### Multi-threaded Producer-Consumer Problem

- Implemented a **C++ program** to solve the multi-producer/multi-consumer problem using '**pthread**', '**mutex**', '**conditional variable**', etc. and went through the core concepts related to the **multi-process synchronization problem**.
- Used the slurm workload manager to develop and test the program by utilizing multiple compute nodes

### Simple Showcase

Simple Showcase is an e-commerce-like web app helping users manage, demonstrate and browse products/images.

- Developed this web application using **Python, Flask, Flask-SQLAlchemy, Flask-Login**
  - Created sign-up and login forms and added **authentication** for user management
  - Managed data with **SQLite3** as a database management system tool.
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## EDUCATION

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### Simon Fraser University

Bachelor of Computing Science | CGPA 3.46/4.33

May 2019 – Dec 2022

### Hohai University

Master of Engineering

Sep 2007 – Jun 2010

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Bachelor of Engineering

Sep 2003 – Jun 2007