

Farhan Labib

+1 (587) 896-3746 | farhan.labib@ucalgary.ca | [LinkedIn](#) | [Portfolio](#)

EDUCATION

University of Calgary

BSc in Computer Science

Calgary, AB

Expected 2027

- **Relevant Coursework:** Database Management Systems, Data Structures & Algorithms, Software Project Management, Computer Networks, Software Design

TECHNICAL SKILLS

Languages: Python, TypeScript, Java, JavaScript, SQL, HTML, CSS

Frameworks & Tools: React Native, Expo, Next.js, Flask, Streamlit, Supabase, MySQL, PostgreSQL

ML/Data Libraries: PyTorch, Scikit-learn, Pandas, NumPy

Developer Tools: Git, GitHub, Jira, ClickUp, Power BI, Tableau, VS Code, Linux

PROFESSIONAL EXPERIENCE

Software Developer

Gist Technologies Inc.

Sept 2024 – Present

Calgary, AB

- Contributing to development and maintenance of a **production iOS app** on the **Apple App Store** built with **React Native**, **TypeScript**, and **Expo** as part of a **capstone industry partnership**.
- Implementing features for news browsing and personalization while resolving critical bugs affecting app stability.
- Supporting **Android pre-release testing** by debugging 10+ platform-specific issues and validating builds in test environments.
- Maintaining backend functionality with **Supabase** (Auth + PostgreSQL database) and external APIs, performing configuration updates and data management.
- Following **Agile development** practices including sprint planning, **GitHub PR reviews**, and versioned releases.
- Writing and maintaining 25+ **unit tests** for shipped features to improve code quality and prevent regressions.

PROJECTS

CIFAR-10 CNN Image Classifier | PyTorch, Torchvision, Scikit-learn, Streamlit, Power BI

January 2026

- Created an **end-to-end** deep learning pipeline comparing a custom CNN (88.40% accuracy) against **ResNet18 transfer learning** (84.39% accuracy) on CIFAR-10.
- Trained models with Adam optimizer and learning-rate scheduling; persisted **best checkpoints** for reproducibility.
- Produced model diagnostics including **classification reports**, confusion matrices, and training curves; presented results through a **Streamlit dashboard**.
- Built a Python **ETL pipeline** to transform experiment outputs into BI-ready datasets and authored a **Power BI dashboard** for model comparison.

AI-Powered Medical Prediction Toolkit | Python, Scikit-learn, Pandas, NumPy

August 2025

- Developed a **modular ML toolkit** to clean, scale, and transform tabular datasets for consistent preprocessing and modeling workflows.
- Evaluated Logistic Regression and SVM on **Breast Cancer Wisconsin dataset** using **cross-validation** and **GridSearchCV**, achieving 98.1% accuracy and 0.985 F1 (LR) vs. 97.6%/0.979 (SVM) with 5-fold CV.
- Automated **diagnostic analytics** including feature importance, ROC/PR curves, and dimensionality reduction (PCA, TSNE) for model insights.

Computer Component Store | Flask, MySQL, HTML, CSS, JS

April 2025

- Architected a full-stack e-commerce platform with customer and admin portals, managing 60+ products.
- Implemented role-based admin workflows for inventory, orders, suppliers, and employees.
- Designed a normalized **MySQL** schema and built Flask endpoints for authentication, cart/checkout, and order history with data integrity constraints.

Self-Checkout System - Java GUI Application | Java, Java Swing, JUnit, Eclipse IDE

December 2024

- Designed UML diagrams and developed Java Swing POS system with barcode scanning, weight validation, and discrepancy handling.
- Engineered payment flows (coin, card, cash) and validated behavior with 20+ automated **JUnit** tests.