# Abbe Azale

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### **Technical Skills**

**Language:** Python, TypeScript, Javascript, C, C++, SwiftUI, SQL

Tools: React, Next.JS, Git, NumPy, Pandas, TailwindCSS, Docker

**Databases:** MySQL, MongoDB, Supabase, Postgres, Firebase

Other: Vim, Pgvector, AWS, Trello

# Work / Entrepreneurial Experience

## Full Stack Developer | Reach

Jan - Aug 2025

- Built a full-stack web application using Next.js, React, and TypeScript to create a platform connecting homeowners and service providers
- Developed secure user authentication and session management features with Firebase, for robust data protection and smooth user experiences
- Integrated real-time communication using Ably, enabling instant messaging between users and enhancing platform responsiveness
- Implemented job posting, browsing, and service provider application management modules to streamline service hiring processes

## Full Stack Developer | Pirate Plumbing

July - Dec 2024

- Designed and implemented a responsive website using Next.js and Typescript
- Developed customer issue submission form for users to submit details and photos of plumbing issues
- Integrated Cloudinary for photo uploads to allow for image handling in the email request
- Configured email notifications for the plumbers to received details from the request form reducing response time by 20%

## Wordpress Developer | Ice More Jewelry

Sept 2023 - June 2024

- Published online e-commerce store using Wordpress, WooCommerce and Elementor increasing sales by 20% in the 4
  months
- Customized Elementor theme with additional CSS which improved customer retention by 30%
- Integrated WooCommerce for secure payments handling over 20 transactions a month
- Optimized search engine optimization increasing organic search by 20%
- Monitored security plugins to reduce vulnerabilities resulting in zero security incidents
- Setup automated email functionality increasing customer satisfaction and returning customers

## Full Stack Developer | St. Mary's Church

Aug 2023

- Developed a blog style website using Next.js and typescript for a local church increasing engagement by 30%
- Worked with clients to create the UI/UX creating 6 pages of layouts in Figma and implemented in Next.js
- Implemented CMS backend reducing time to post photos, videos and news articles by 50%
- Successfully added NodeMailer API improving contact form submissions by 15%

#### Lot Attendant | Dilawri

Sept 2018 - May 2022

- Ensured that cars were ready for customer pickup
- Tracked vehicle locations through different car lots with software programs
- Delegated Tasks in a fast-paced environment to make processes more efficient
- Responsible for used car inventory and made sure incoming vehicles went through the proper steps
- Identified and solved problems before they could escalate

# **Personal Projects**

# iOS Health App (flash)

https://github.com/abbeazale/flash

SwiftUI, Firebase, Apple HealthKit

- Built an iPhone health app made with SwiftUI to track runs and provides users with additional data
- Integrated with Apple's HealthKit to get data and Firebase to store information
- Increased efficiency of app with optimization of memory and queries
- Improved data formatting and data displayed with formulas utilizing the given values

#### Record me

https://github.com/abbeazale/recordme

SwiftUI, ScreenCaptureKit, AVFoundation

- Developed a native macOS screen recording application from concept to functional prototype using SwiftUI,
   ScreenCaptureKit, and AVFoundation
- Multi-source capture system enabling users to record full displays or specific application windows with real-time preview capabilities
- Managed complex application states, including asynchronous operations for content fetching, preview updates, and recording processes, for a smooth user experience

## **Academic Projects**

#### **Recommend Me**

https://github.com/abbeazale/recommendme

Next.js, Python, Supabase, Pgvector, Google Gemini

- Full-stack music recommendation app using Next.js frontend, Python FastAPI backend, and Supabase with pgvector for vector similarity search
- Developed a vector database using pgvector, enabling efficient nearest-neighbor search with ivfflat indexing and hybrid SQL/vector queries
- Implemented data preparation Python scripts for cleaning, deduplication, embedding generation (using SentenceTransformer), PCA-based dimensionality reduction, and feature normalization

#### MapMe

https://github.com/abbeazale/MapMe

React, TypeScript, Supabase, CesiumJS, Docker

- Implemented a Node/Express microservices architecture with Supabase Edge Functions to fetch real-time data via an API gateway
- Led frontend development using React and reusable CesiumJS map components for an interactive user experience
- Collaborated in a four person Agile team, using sprint planning, code reviews, and CI/CD pipeline configuration for automated deployments of microservices

#### Education

# **BSc in Applied Computer Science (Database Option)**

Expected Dec 2026

British Columbia Institute of Technology

GPA: 85%

# **Diploma in Computer System Technology**

Sept 2021 - May 2023

Vancouver Community College