

# Shelley Chen

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## SKILLS

**Languages** | Javascript, Typescript, Kotlin, Python, Ruby, Java, GraphQL, SQL, C++  
**Frameworks** | Node.js, Express, Spring Boot, Ruby on Rails, React, Next.js, Angular  
**Tools** | Git, Kafka, AWS, Postman, PostgreSQL, Datadog, MongoDB, Docker

## EXPERIENCE

**Wealthsimple** | Software Developer Intern  
Toronto, ON

May 2024 - Aug 2024

- Implemented a scheduled service in **Kotlin** to automatically reprocess failed client activities, **reducing manual on-call retries by ~300 per month** and significantly enhancing operational efficiency
- Led the migration of a legacy financial processing system by replacing Oracle stored procedures with an event-driven architecture to write to the general ledger, reducing system complexity and ensuring backward compatibility
- Built new cheques processing flow within a **Ruby on Rails** service, publishing Kafka messages to a consumer service that generates corresponding ledger entries
- Improved the usability of custom tooling for the Finance Operations team using **React** and **Ruby on Rails**, optimizing workflows and efficiently **handling 600+ internal transfers monthly**

**Miovision** | Software Developer Intern  
Kitchener, ON

Sep 2023 - Dec 2023

- Owned development of a pipeline to upload frames captured by Miovision's IoT devices to Amazon S3, **increasing training data available to the computer vision team by 100%**
- Implemented and deployed a **Node.js** microservice for video clip creation from archived recordings, **processing user requests from 14,000+ devices daily**
- Developed **Kotlin** services using **Spring Boot** to process, normalize, and publish incoming device data to Kafka, facilitating consumption by downstream services
- Created integration for device metrics from TimescaleDB into Grafana dashboards using SQL, enabling developers to efficiently address on-call issues and analyze system performance

**Health and Rehab Research** | Software Engineer Intern  
Mississauga, ON

Jan 2023 - Mar 2023

- Developed an interactive desktop interface using **React** that displays real-time camera feed and pose estimation, used by **2,000+ daily users**
- Implemented real-time face detection using live camera feed by leveraging the Mediapipe library
- Trained CNN models for human pose classification in **Python** and Tensorflow, **achieving a 93% validation accuracy**

## PROJECTS

**UW Blueprint** | Project Developer

- Collaborated with a cross-functional team of 13 developers and designers to build a task management platform for a non-profit organization, serving **200+ users**
- Leveraged Typescript and GraphQL to build a robust API layer, facilitating task creation and management

**SYDE 2027 Class Profile** | [Website](#), [GitHub](#)

- Developed and launched a responsive Next.js application that showcases dynamic data with **100+ weekly visits**
- Integrated a MongoDB database into application, enabling seamless access and display of data from **80+ students**

## EDUCATION

**University of Waterloo** | BAsC in Systems Design Engineering

Sep 2022 - Apr 2027

Relevant Courses: Data Structures & Algorithms (C++), Digital Computation (C++)