

# Annie Cai

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## Education

### University of Waterloo

B.ASC IN SYSTEMS DESIGN ENGINEERING - GPA: 3.98/4.00, 94%

Waterloo, ON

Sep 2022 - May 2027

- *Awards:* Term Dean's List, Faculty of Engineering Entrance Scholarship (\$8000), President's Distinction (\$2000)
- *Courses:* Programming (C++), Data Structures and Algorithms (C++), Digital Systems, Human Factors in Design

## Skills

**Languages:** C++, Python, Typescript/Javascript, Java, SQL

**Technologies:** React, Node, Next.js, Express.js, Spring Boot, Flask, Angular

**Tools:** Git, AWS S3, PostgreSQL, MySQL, Azure/Azure DevOps, Docker, Kubernetes

## Professional Experience

### Home Trust Company

Toronto, ON

SOFTWARE DEVELOPER

Jan. 2023 - Apr. 2023

- Transferred **over a million** rows of data from **Azure Blob Storage** to **Azure SQL** by architecting end-to-end ETL pipeline
- Increased **deployment efficiency by 50%** by creating **CD** pipeline scripts in **Azure DevOps**
- Contributed to a new summary widget for the Home Digital app using **Angular**, offering users a centralized view of their banking data, **boosting customer retention by 25%**
- Spearheaded SEO optimization tactics, resulting in a **40% increase** in the Oaken Financial website search rankings
- Advocated for code readability and reusability to better support current and future developers by authoring a comprehensive software documentation

### UW Tech+

Waterloo, ON

FULLSTACK DEVELOPER

Jan. 2023 - Present

- Owned the front-end development of the UW Tech+ website and mentor-mentee matching portal with **React**, supporting **100+ users**
- Architected ETL pipeline to stream data from the mentor-mentee portal to **AWS S3**
- Designed and developed **6+ RESTful APIs** using **Python Flask** to facilitate seamless data exchange

## Projects

### Sign:Here

React, Flask, Cohere, Qdrant

- Built a natural language chat-bot that takes legal documents as context and answers questions regarding the documents
- Optimized **response accuracy by 80%** by utilizing semantic search, vector similarity search, and context injection

### Write:Here | Hackville 2023 Winner

React, Next.js, GCP, Vercel, Cohere

- Built an app allowing people to send emails using computer vision
- Constructed CI/CD pipelines using Vercel to implement code previews and build checks for deployments

### Cafe Management System

Angular, Spring, MySQL, Docker

- Developed a retail management system (RMS) that handles basic cafe operations more efficiently
- Features a JWT authentication system, mailing, and CRUD operations for managing categories, products, bills, and staff

### Apollo

Python, OpenCV, Mediapipe

- Trained an ML model to utilize computer vision to determine early markers of cerebral palsy using the HINE evaluation
- Extracted over **10,000 data points** using OpenCV and Mediapipe, processed via NumPy and Pandas

## Community & Leadership

### Superposition Toronto

Toronto, ON

SENIOR DIRECTOR OF COMMUNITY ENGAGEMENT

Aug. 2020 - Aug. 2022

- Led student team of **30+ members** to empower girls in STEM, reaching over **33k individuals** across 80 countries
- Organized a cross-team initiative, The SuperPOSITRON, an international and all female hackathon, with **over 1000 registrations**, \$62k in prizes and 24 workshops and talks