# Ariel (Ying Chen) Liu

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## **Experiences**

### Software Engineer Intern

May 2024 - Sep 2024

**BDO LLP** 

Toronto, ON

- Authored over 20 PRs, implemented features in both backend (FastAPI, Azure Functions) and frontend (React)
- Designed an automated testing framework using Python, enhancing test coverage by 80%.

#### Part-time Software Engineer

Dec 2023 - Apr 2024

Tugende

Remote

- Worked with three former Amazon employees and an Oracle employee to establish a tech shipping startup.
- Spearheaded the end-to-end development of the <u>Tugende</u> website. Built and launched the site, incorporating JavaScript and APIs to develop a shipping cost calculator.

# Data Engineering Intern

May 2023 - Sep 2023

**BDO LLP** 

Toronto, ON

- Managed ETL processes using Azure stack (Data Factory, Data Lake)
  - o Developed PySpark code within Databricks to consolidate multiple sources of data
- Streamlined data ingestion processes by automating CSV-to-SQL transfers, using C# scripts in Microsoft SSIS
  - o Reduced a data ingestion process runtime by over 50%

# **Projects**

# PulseDaily: Survey Application for Tech Companies

Jun 2024

- Engineered a scalable backend with AWS RDS, Lambda, and EC2 for efficient survey data processing and API management.
- Developed a cross-platform Electron.js desktop app for seamless data collection and a React web dashboard for real-time survey insights.

### CalorMe: Identifying Food Using Al

Sep 2021

 Trained an Al Computer Vision model achieving over 90% accuracy. Applied Transfer Learning with the InceptionV3 model and integrated model with a Flutter-developed app.

#### **Extracurriculars**

- Showcased expertise in Computer Vision as a <u>featured speaker</u> at a General Assembly **global conference** focusing on cutting-edge topics in data science, machine learning, and neural networks.
- Founded the Woodlands Hack Club and hosted a <u>hackathon</u> with ~150 attendees ranging from experienced to first-time hackers, and secured sponsorships exceeding \$30,000 in value.

#### Education

#### University of Toronto (St. George)

Aug 2022 - May 2026

Computer Science (B.S.)

Toronto, ON

- Dean's List Scholar, Victoria College Council Member, Vic One Program Schawlow Stream
- AEAC Computer Vision Engineer and Web Development lead (working with YOLOv8 and Vue.js)

## Technical Skills

Programming Languages: Python, Java, C#, C++, SQL, JavaScript/HTML/CSS, Assembly, Bash

Frameworks and Libraries: React, Flask, Keras, TensorFlow, JavaFX, Pandas, NumPy

Software Tools/Services: AWS, Microsoft Azure Stack, Git, REST APIs

Certifications: Responsive Web Design, Computer Vision, Intermediate Machine Learning