

# Ariel (Ying Chen) Liu

[ariel.yc.liu@gmail.com](mailto:ariel.yc.liu@gmail.com) | [in/arielycliu](https://www.linkedin.com/in/arielycliu) | [github.com/arielycliu](https://github.com/arielycliu) | <https://arielycliu.github.io/>

## Education

### University of Toronto

May 2025

### Bachelor of Computer Science, Artificial Intelligence Specialization

3.6/4.0 GPA

- **Courses:** Data Structures and Algorithms, Object Oriented Programming, Machine Learning, Relational Databases

## Skills

**Languages:** Python, C, C#, C++, Java, PostgreSQL, JavaScript, Bash  
**Frameworks:** React/React Native, Flask, FastAPI, TensorFlow, PyTorch, Keras, .NET  
**Tools:** AWS, Azure, NodeJS, Git, Databricks, MongoDB, Figma

## Experience

### Shopify

Jan 2025 – May 2025

### Software Engineering Intern

Toronto, Ontario

### BDO LLP

May 2024 – Aug 2024

### Software Engineering Intern

Toronto, Ontario

- Developed and launched an internal full-stack AI chatbot to **5000+ users** across BDO using **React, Python (FastAPI)**
- Designed and implemented an automatic document indexing retry queue using **Azure Functions** and **Queue Storage**, leading to a **95% recovery rate** on failed document uploads
- Built a document ingestion pipeline for text extraction and AI-driven summarization using **FastAPI** and **Azure**

### PulseDaily

Jan 2024 – May 2024

### Software Engineering Intern

Remote, USA

- Developed an **Electron.js** desktop app for seamless data collection and a **React** web dashboard for survey insights
- Designed a **PostgreSQL** database and built **REST API** endpoints using **AWS** to handle secure survey data storage
- Created dynamically generated graphs and integrated a conversational AI chatbot to deliver query-specific insights

### BDO LLP

May 2023 – Aug 2023

### Data Engineering Intern

Toronto, Ontario

- Developed production ETL data pipelines, using **Azure Data Factory, Python, Spark, Databricks, and MySQL**
- Streamlined data ingestion processes by automating CSV-to-SQL transfers, using **C# scripts** in Microsoft SSIS
- Diagnosed and resolved a critical system-wide shut down, then authored a troubleshooting guide for future errors

Currently looking for Summer 2025 and Fall 2025 internships!

## Community & Leadership

### Hack the Woodz Hackathon

June 2022

### Founder & Organizer

Mississauga, Ontario

- Founded the Woodlands Hack Club and hosted a hackathon with **~150 attendees** ranging from experienced to first-time hackers, and secured sponsorships exceeding **\$30,000** in value

### Aerial Evolution Association of Canada

Sep 2024 – Present

### Web Development Lead & Computer Vision Lead

Toronto, Ontario

- Collected, cleaned, and augmented extensive datasets to train **computer vision** YOLOv8 models with **98% accuracy**, and seamlessly integrated the models with drone systems using **ROS**
- Built a real-time drone visualization web applications in **Vue.js** and **Svelte**, featuring accurate drone positioning and live status updates to improve flight monitoring and control

## Projects

### Food for Thought (React, JavaScript, Python, Flask, REST APIs, OpenCV, Tensorflow)

- Trained a YOLOv8 **computer vision** model achieving over **95% accuracy** on 100+ food classes and integrated model with a **Flask (Python)** backend and **React** frontend

### Mango Dash (Java, Clean Architecture, SQL, REST APIs)

- Built a scalable **Java** application with **clean architecture** and RESTful APIs, in an **Agile** collaborative environment