

## Education

### University of Toronto

M.Eng., Computer Engineering

**Toronto, Canada**

Jan. 2024 - Jun. 2025

### Beijing University of Posts and Telecommunications

B.Eng., Software Engineering

**Beijing, China**

Sep. 2019 - Jun. 2023

## Technical Skills

Python, JavaScript, Java, Machine Learning, Deep Learning, MLOps, LLM Agent, PySpark, Azure, Git, Github, Flask, Django, MySQL, PyTorch, Mlflow, Microsoft Fabric, Databricks, Video Encoding, Audio Processing, Databricks

## Work Experience

### Microsoft

**Beijing, China**

*Software Engineer Intern*

Feb. 2023 - Dec. 2023

- **Benchmarked** AutoML solution between **Azure Machine Learning** and **Azure Databricks**, evaluated performance and efficiency, analyzed user experience from different user aspects.
- Contributed to the open-source **AutoML** and **Hyperparameters Optimization** library **FLAML** on **Github**.
- Initiated the internal version of FLAML for **Microsoft Fabric** and contributed **100+ PRs**.
- Enlarged Machine Learning model pool for AutoML by adding 15+ Machine Learning models based on **PyTorch Lightning**, **PySpark MLlib**, **Statsmodel** and **Scikit-Learn**.
- Integrated multiple **MLOps** services of Fabric platform **MLFlow** to FLAML, including ML experiment tracking, management, analysis, visualization, artifacts logging and model deployment.
- Developed Autonomous Feature Engineering combining with **LLM Agent**, utilizing **AutoGen** project.

### Call Fusion

**Toronto, Canada**

*Research Software Engineer*

Sep. 2024 - Present

- Redesigned the technical architecture, migrating to an **Audio Agent** using **OpenAI's Real-time API**, creating an end-to-end Speech-to-Speech generation solution with features like scheduling future calls and ETL for client information.
- Researched and integrated advanced audio processing techniques, such as noise reduction using the neural network-based algorithm **RNNoise** and external solutions like **Dolby IO**, and voice activity detection using **WebRTC**.

### National University of Singapore

**Singapore**

*Undergraduate Research Assistant*

Apr. 2022 - Feb. 2023

- Participated in a research project focusing on **Event Forecasting** with **Temporal Knowledge Graph** at the NExT++ Centre, School of Computing.

## Side Projects

### D2Helper

Full-Stack Web Application for Destiny 2

- A Destiny 2 information and tracking tool with a **4,000+** user base.
- Built a modern user interface using **JavaScript** and **CSS**. Implemented **RESTful API** backend service using **Flask** with **MySQL** cloud database. Used **Docker** for deployment on Tencent Cloud's **Serverless** Application.

### AutoGen

A programming framework for Agentic AI

- Active contributor of this **25,000+** stars open-source project, reviewed and proposed multiple PRs.
- Integrated **Anthropic Claude** models as alternative foundation model for LLM Agent.
- Social cognitive science simulation, using multi-agent conversation and **RAG** with **Knowledge Graph**.