Wendong L. (647) 233-7096 | rethebrewmaster@gmail.com | Website | LinkedIn | Github

Education

University of Toronto

Toronto, CA

M.Eng., Computer Engineering

Jan. 2024 - Apr. 2025(Expected)

Beijing University of Posts and Telecommunications

Beijing, CN

B.Eng., Software Engineering

Sep. 2019 - Jun. 2023

Technical Skills

Programming Language: Python, JavaScript, TypeScript, Java, C++, Solidity, OOD

Frameworks and Tools: Linux, CI/CD, Git, Azure, AWS, GCP, PySpark, Flask, Django, MySQL, Node.js, Databricks

AI&ML: MLOps, LLM Agent, PyTorch, Tensorflow, MLflow, GNN, Transformer, Huggingface, XGBoost, LightGBM, Time-series **Domain Knowledge**: Multimedia Encoding, Distributed System, Blockchain(Smart Contract and DApp), Parallel Computing

Experience

Call Fusion Toronto, CA

Machine Learning Engineer

Sep. 2024 - Present

Backend Services and Audio LLM Agent, Live Demo Website

- · Integrated RNNoise, a neural network-based noise-reduction algorithm, boosting transcription accuracy by 13%.
- Evaluated and migrated from **Faiss** to **ChromaDB** for Retrieval-Augmented Generation (RAG), **improving retrieval performance** by **16%**, **reducing peak latency by 96%**.
- · Used Celery to schedule database updates, serving on AWS Elastic Beanstalk to improve stability and availability.

Microsoft Beijing, CN

Software Engineer Intern

Feb. 2023 - Dec. 2023

FLAML, an Automated Machine Learning (AutoML) Library

- · Contributed to the design and led the development of an internal version of FLAML for the Microsoft Fabric platform.
- · Authored articles to help data scientists onboard this Python library, user number increased by 263% after internship.
- Benchmarked AutoML solutions against Azure Machine Learning (AML) and Azure Databricks; FLAML on Fabric
 achieved 30× faster runtimes than AML and a 16% average performance improvement over Azure Databricks.
- Expanded AutoML model pool by adding 15+ models (PyTorch Lightning, PySpark MLlib, Statsmodels, Scikit-learn).
- Integrated multiple MLOps services (experiment tracking, visualization, artifact logging, model version control and serving) with custom MLflow backend, reducing inference latency by 37%.
- Developed an autonomous feature engineering module using LLM Agent, reducing human labor for data scientists by automating feature engineering experiments.

National University of Singapore

Singapore, SG

Undergraduate Research Assistant

Apr. 2022 - Feb. 2023

· Participated in a **Temporal Knowledge Graph** research project at School of Computing, NExT++ Research Centre.

Projects

AutoGen, A programming framework for Agentic Al

Github Link

- · Contributed to high-level system design in an Agentic AI framework with 35k+ GitHub stars.
- · Early contributor to the RAG module, benchmarking various vector databases and integrating ChromaDB.
- · Added support for **Anthropic Claude** models as an alternative foundation model for LLM Agents.

D2Helper, A Full-Stack Web Application for Destiny 2

- · Developed a full-stack web application for the Destiny 2 community with 4000+ active users.
- · Built frontend with JavaScript and CSS; implemented a RESTful backend with Flask and a MySQL cloud database.
- Deployed via **Docker** on Tencent Cloud's **Serverless** platform.