Yaxuan Chen

+1 3658835337 | cheny992@mcmaster.ca | github/Anan1225 | Passionate about coding :)

SKILLS

Languages: Python, Go, SQL, C++, **Haskell**, JavaScript, **TypeScript**, HTML/CSS
Databases & Platforms: UNIX, MySQL, MongoDB, NoSQL, PostgreSQL, AWS Cloud, Azure
Tools: Pytorch, Tensorflow, ETL, Docker, Snowflake, Minios, S3, Kafka, Airflow, Spark, Hadoop, Hive, Flink

EDUCATION

McMaster University, Hamilton, ON, Canada   Jan. 2024 - Present
Master of Science in Computer Science | Grade 3.85/4

Northwestern Polytechnical University, Xi'an, Shaanxi, China   Sep. 2019 - Jul. 2023
Bachelor of Engineering in Computer Science | GPA 3.5/4.1

EXPERIENCE

Research Assistant in McMaster Data Science Lab   Hamilton, Ontario
Prompt Engineering in Data Tasks   May. 2024 – Present
- Conducted research using **LangChain** to apply **LLMs** to data tasks, including GPT, LLaMA, and Mistral, leveraging **Python** and **TypeScript** for prototyping.
- Managed **large-scale datasets** using **SQL** and **ETL pipelines**, optimizing data processing and query efficiency.
- Accelerate LLM performance across varying input configurations and analyze inference capabilities.
- Develop techniques to compensate for potential background knowledge gaps, improving data interpretation.

Open-source Contributor for Apache Answer   Remote
OSPP Program Participant   Jul. 2024 – Oct. 2024
- Developed a **Slack user center integration plugin** for Apache Answer with a **modular code structure**.
- Integrated Slack **API** for user authentication(login/sign-up) and notifications, expertise in **third-party API**.
- Implemented **Slash Commands** for users to submit questions directly from Slack, enhancing **user experience**.
- Collaborate with **Apache Answer**(13k-star) Community and successfully released in **Version 1.4.1**.

Teaching Assistant in Principle of Programming Language   Hamilton, Ontario
Undergraduate Level 4 course tutorials   Sep. 2024 – Dec. 2024
- Reasoning about **domain-specific languages**, in-program analyses of correctness, security and efficiency.
- Taught principles of programming languages, focusing on **Haskell** and **functional** programming paradigms.
- Guided students in understanding syntax and semantics through hands-on exercises, including term evaluation and lambda calculus reduction strategies.

PROJECTS

Haskell-Based Expense Tracker   Jun. 2024
- Developed a backend expense tracker using **Haskell** and **PostgreSQL** for data storage.
- Implemented **RESTful APIs** for **CRUD** operations on expenses and categories.
- Integrated a third-party **currency conversion API** to support multi-currency tracking.
- Designed a **modular and type-safe architecture** using Haskell's functional programming paradigms.

Wordboard, a Memorization App   Mar. 2024
- A **full-stack** web application featuring **Go, Vue, Node, React, and Typescript**, focusing on memorizing aid.
- Include a **Golang** API built on the framework **Gin** with a **Vue 3** client logging in and updating user details.
- **Redis** and **Postgres** for data persistence and **Google Cloud Pubsub** for the event publication.
- Deploy inside of docker containers with routing provided by the **Traefik reverse proxy**.

Django-Based Online Recruitment System   Nov. 2022
- Developed an online recruitment system using **Django, Python, SQL**, and **Bootstrap**.
- Integrated **DingTalk API** for seamless notifications and user management.
- Supported **data backup, migration, and recovery** for enhanced system reliability.
- Implemented a customizable management system for recruiters, interviewers, and candidates.