

YUHAO(MARTIN) YANG

[LinkedIn](#)

[Portfolio](#)

Mountain View, CA

669-281-6397

martinyang0416@outlook.com

EDUCATION

Carnegie Mellon University, Silicon Valley Campus

Master of Science | Software Engineering

- Teaching Assistant (Graduate Course, 2024 Spring)

Mountain View, CA

08/2024 - 12/2025

University of Toronto, St. George Campus

Honours Bachelor of Science (High Distinction) | Computer Science

- Dean's List Scholar (4 Years), In-Course Scholarship

Toronto, Canada

09/2019 - 05/2024

EXPERIENCE

Canada Huawei

Software Engineer (Distributed AI System R&D), Co-op

- Implemented and debugged over 20 APIs in the MindPandas to support Scientific Computation that adopted Multithreading, Multiprocessing, and Distributed Systems. Implemented Machine Learning data pre-processing pipeline for MindSpore.
- Research on Substrait MetaIR parser in GaussDB to support multiple relations to the substrate plan. Involved in creating and optimizing complex query execution plans that allowed for multiple execution paths.
- Proposed the new Dynamically Switching Join strategy from Spark Adaptive Query Execution optimizer via starting multiple joint strategies together and dynamically allocating workload based on the running time implemented in C++.

Markham, Canada

05/2022 - 05/2023

BubbleMe

Co-founder, a social media platform focused on classmate social networking

- Built the original team and led preliminary market research analysis. Designed product function and interface, dug user needs for product innovation and upgrade. Acted as the project manager to coordinate product development and planning.
- Presided writing business plans and presented over 20 financial roadshows. Succeeded in finding sponsorships and financial support.

Markham, Canada

09/2019 - 05/2023

DIDI

Data Analyst/Scientist, Intern

- Utilized Hive SQL, Python, and Machine Learning techniques to predict and visualize trends from millions of marketing and user behavior data points, delivering actionable insights through weekly and monthly data reports to the head of the South American market.
- Contributed to business strategy development by conducting in-depth analyses on strategy effectiveness, transaction attribution, and user behavior, alongside performing industry best practice research to inform decision-making.

Beijing, China

06/2021 - 08/2021

Junfei

Software Engineer, Intern

- Developed crawler programs for content scraping through requests, Scrappy, Scrappy-Redis, and XPath, and ensured data accuracy through data cleaning and filtering, developed data cleaning and weight removal modules.
- Participated in re-architecture of the code structure and framework, introduced the new framework and hierarchical logic, boosted the running time by over 30% overall, and decreased memory usage by around 5%.

Nanjing, China

05/2020 - 08/2020

RECENT PROJECT

Emergency Social Network Full Stack Project

Full-Stack Developer

- Developed a web-based platform for real-time communication. Built the server-side logic using **Node.js** and **Express.js**, implemented real-time messaging with **Socket.io**, and managed relational data in **MySQL** (on **AWS**). Implemented responsive user interface using **HTML5**, **CSS3**, **JavaScript**, and **Bootstrap**.
- Designed and implemented over 20 RESTful APIs for seamless front-end and back-end integration and scalability. Implemented **CI/CD pipelines** to automate deployment and streamline development workflows.
- Managed project workflows with Scrum methodologies and Kanban boards; improved code maintainability via Sigrid analysis.

Mountain View, CA

08/2024 - 12/2024

SKILLS

Programming Languages: Python, Java, C, C++, CUDA, SQL, JavaScript, HTML, CSS, R, Racket, Haskell, etc

Courses Taken: Software Development, Algorithm, Data Structure, Database, Numerical Analysis, Artificial Intelligence, Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Computational Linguistics, Operating Systems, Web Programming, Calculus, Linear Algebra, Probability, etc