Yu-Hsuan (Darcy) Yang

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Education

Nanyang Technological University   Singapore

Master of Science in Financial Technology (Intelligent Process Automation Specialisation)   *Aug. 2024 - June 2025*

National Chiao Tung University   Hsinchu, Taiwan

Master's degree in Institute of Data Science and Engineering   *Sept. 2018 - June 2020*

National Cheng Kung University   Tainan, Taiwan

International Bachelor Degree Program on Energy   *Sept. 2014 - June 2018*

- Minor: Mathematics

Work Experience

FTSE Russell, An LSEG Business   Taipei, Taiwan

Senior Process Automation Specialist   *July 2025 - now*

- Develop a module-based automation tool for the index review process, which had been done manually. This system enables index reviewers to design the index construction process by a drag-and-drop UI.
- Propose a general method to automate the rebalancing process, including constituent weights adjustments and reallocation. This optimization reduces at least 4 times of the code base complexity.
- Maintain documentation and guidelines for users to understand the modules functionality.

RV Capital Management   Singapore

Intern Analyst   *Jan. 2025 - March 2025*

- Automate financial document parsing task for the risk team by applying few-shot learning on LLM which reaches 90% accuracy and build Power BI dashboards on behalf of error analysis.
- Design a RAG-based lightweight chatbot that works with long documents by efficiently summarizing them and constructing vector databases. Improve the accuracy in the retrieval stage with a two-staged retrieval process.
- Develop a web scraping tool to automatically download trading reports received from financial institutions. Database management is implemented by ORM.

Sinopac Holdings   Taipei, Taiwan

Assistant Manager, AI engineer in Digital Technology Division (DTD)   *Sept. 2020 - July 2024*

- Reinforcement learning in asset allocation: Aimed to maintain a portfolio of stocks that can beat the TWSE market based on their profile and transaction behaviors.
- Machine learning pipelines for customer analysis: Predicted the preferences of customers in certain financial products or campaigns based on their profile and transaction behaviors.
- Workload Orchestration: Optimized the utilization of computational resources in the development environment by k8s and docker.
- Risk and control self-assessment automation: Developed a pipeline to summarize the assessment advice from the risk control department by LLM, clustering and classification.
- Dojo for rapid AI demonstration: Designed a platform for displaying the GenAI and LLM applications developed by DTD. Responsible for front-end development.

Certificates

Bloomberg for Education   Oct. 2024~April 2025

- Bloomberg Financial Fundamental: Gain knowledge of financial markets, risk and reward and portfolio management.
- Bloomberg Market Concepts: Delve into concepts of financial instruments such as commodities, fixed income, equities and options.

Technical Skills

Programming	C++, Python, SQL, Golang, Java	**Finance**	Quantitative methods in risk and analysis
AI & ML	scikit-learn, Pytorch, LangChain	**Cloud Platform**	GCP, AWS
Database	MSSQL, PostgreSQL	**Web Development**	Svelte, React, Django, Spring Boot
Language	Mandarin(native), English(IELTS 7)		