JIMMY LIU

PROFESSIONAL SUMMARY

AI/ML engineer with specialized expertise in LLM quantization and foundation models. Seeking an opportunity to contribute to AI development, leveraging LLM optimization and deployment background.

SKILLS

Programming Languages:

- Agent Coding
- Python (Advanced)
- PyTorch & TensorFlow
- Git version control

AI/ML Expertise:

- LLM fine-tuning & deployment
- Foundation model dev.
- Deep learning optimization
- Quantitative analysis

Additional Technical Skills:

- Linux administration
- Verilog
- Communication
- English TOEIC 935

EXPERIENCE

EDA Software Engineer

MediaTek - Hsinchu, Taiwan

- Implemented and optimized LLM-based workflows, achieving 50% acceleration in processing speed.
- Developed and maintained Python-based automation tools for workflow optimization.
- Created comprehensive technical documentation and user guides for cross-team collaboration.
- Utilized Git for version control and collaborative development.

Impedance Engineer

Broadcom - Hsinchu, Taiwan

- Designed and implemented new automated workflow system using Python, reducing processing time by 70%.
- Led technical documentation efforts and knowledge sharing initiatives across teams.
- Collaborated with cross-functional teams to optimize design solutions.

EDUCATION

Master's Degree: Institute of Artificial Intelligence Innovation

National Yang Ming Chiao Tung University - Hsinchu, Taiwan

- Focusing on LLM calibration; coursework in machine learning & deep learning fundamentals.
- Experience in LLM fine-tuning, Retrieval Augmented Generation (RAG), and test bench.
- $\bullet\,$ Designed software simulations of AI models to guide hardware acceleration development.

PERSONAL PROJECTS

• Algorithmic Trading Agent for TSMC Stock Using Deep Reinforcement Learning

- **Developed** PPO agent with **FinRL** based on historical market data and technical indicators.
- **Engineered a data pipeline** on time series data and evaluate the agent's strategy via a multi-year backtest, analyzing performance with metrics like **Sharpe Ratio** and **Max Drawdown**.

• YouTube Trend Analysis & NLP Application:

- Developed system extracting/analyzing YouTube comments (YouTube Data API).
- Applied Hugging Face Transformers (sentiment) & TF-IDF (keywords).

• LLM-Powered Data Retrieval & Filtering:

- Engineered LLM solution with function calls for targeted YouTube video search.
- Implemented regional/keyword-based trend filtering & automated comment data fetching.

• Multi-Agent AI Resume Parser & Analyzer:

- Engineered LLM solution to extract information and save in excel format.
- Analyze the information in excel to output the summary of the resume.