Zhiyu Liu (Quentin Liu)

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EDUCATION

University of California, Los Angeles Sept. 2024 - Dec. 2025

Master of Engineering. Focus on Artificial Intelligence.

- **GPA:** 3.77/4.0
- **Selected courses:** Reinforcement Learning (A), Natural Language Processing (A), Large Scale Networks (A), Large Scale Machine Learning (A-), Data & Business Analytics (A), Entrepreneurship for Engineers (A-)

Shanghai Jiao Tong University | ParisTech Elite Institute of Technology (SPEIT) Sept. 2020 - June 2024

Bachelor's Degree in French Language & Information Engineering

- **GPA:** Information Engineering (91/100), French Language (87/100)
- **Selected courses:** C Program and Algorithm Analysis (91), Data Structure (94), Probability & Statistics (96), Database System Concepts (93), Machine Learning (96), Computer Networks (91), Computer Organization and Architecture (93)
- **Honors and Awards:** Merit Student Honor (4%), Outstanding graduate of Shanghai Jiao Tong University (10%)

PROFESSIONAL EXPERIENCES

Ant Group, AI Algorithm Engineer June 2025 - Aug. 2025

- Developed and deployed the AISDR unified base model to replace separate fine-tuned models for **IM inbound strategy, KYC deep service, and core account recommendation**, enabling a single deployment across business lines that reduced redundant training, improved dynamic resource scheduling, and enhanced model rigor and adaptability through full integration of business and open-domain/financial data
- Built and curated large-scale training datasets by **synthesizing millions of rule-based samples via upstream business info and prompt templates**, and systematically processing existing open-source, proprietary, and business data sources through **reasoning/no-reasoning classification and standard answer existence checks**, thereby standardizing inputs for SFT, DPO, and GRPO pipelines
- Designed and implemented reward functions (format, general_accuracy, math_accuracy, soft_overlong) and integrated **DAPO + 80/20 High-Entropy Minority Tokens RL** into GRPO training
- Built and conducted a standardized multi-benchmark evaluation pipeline across **FinEval, OpenFinData, IFEval, and CFlue**, where mixed SFT+RL experiments delivered a **+3.9 gain in financial rigor over Qwen3-32B baseline and +1.9 over business-only models**, with consistent improvements in single-source tests confirming dataset quality and RL feasibility, and derived key insights on mitigating evaluation variance, balancing SFT/DPO/RL mixes, and optimizing data composition for both rigor and general capability

MINIMAX, LLM Engineer Mar. 2024 - June 2024

- Led the development of **repo-level datasets** for ABAB7's pre-training based on Github source codes, producing **117 billion tokens**, enhancing the model's abilities in handling cross-file code
- Engineered a dependency graph from Wikidata internal references using mwparserfromhell and built long context wikidata through topological sort, producing **98 billion tokens** for ABAB7's long-text data comprehension pre-training
- Led the scraping, quality assessment, and rewriting of over **20,000 LeetCode QA pairs**, producing **40M million tokens** for ABAB7's supervised fine-tuning, which **improved the model's performance by 1%** in HumanEval+ code generation task
- Expanded lm-evaluation-harness evaluation framework on various open-source benchmarks, incl. **HumanEval(+), Mbpp(+), Natural Code Benchmark, and DS1000,** enabling a more comprehensive assessment of model abilities

SELECTED PROJECTS

Intelligent Fault Diagnosis of Rolling Bearing based on Incremental Learning Dec. 2023 - June 2024

- Proposed and implemented VEGEM, an incremental learning model combining Variational Mode Decomposition (VMD), Wide Deep Convolutional Neural Network, and Gradient Episodic Memory, tested on CWRU dataset
- Performed a comparative analysis, showing that **VMD achieved the highest final accuracy (90.6%)** across five phases, outperforming Empirical Mode Decomposition (EMD) (87.8%) and Continuous Wavelet Transform (CWT) (81.2%)
- Achieved competitive results, **maintaining over 90% accuracy across five phases**, outperforming baseline methods such LLDM (93.9% vs. 92.9% at phase 4) while **reducing training time by 46% compared to iCaRL** method model. Paper accepted for publication

PUBLICATIONS

- **Zhiyu Liu** and Yongqing Qu: Crowd Counting Model based on CNN and Transformer. *Computer Engineering and Information Processing (CEIP), 2023.*
- **Zhiyu Liu**, Zhiyi Zhang, Mohamed Sallak and Siqi Qiu*: Intelligent Fault Diagnosis of Rolling Bearing based on Incremental Learning. *International Conference on System Reliability and Safety Engineering (SRSE), 2024.*

Others

Languages: Chinese (Native), English (**GRE 337, TOEFL 104**), French (Intermediate) **Hobbies**: Violin

Programing skills: Python, C/C++, MATLAB, SQL **Tools**: Git, Swift, vLLM, MS Office, Tableau