尹硕

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教育经历

清华大学丨经济与管理学院丨金融硕士　　2025/9 - 2027/6(预计)，中国北京

- GPA: 4.0/4.0 | **在修课程：**金融数据分析，金融衍生工具，金融科技导论，大模型与生成式人工智能

上海交通大学丨生物医学工程学院丨工学学士(电子信息方向)　　2021/9 - 2025/6，中国上海

- GPA: 3.8/4.0 | 上海交通大学 A 等学业奖学金 | 上海交通大学优秀毕业生
- **主要课程：**数据结构，数理方法，信号与系统，统计学，线性代数，量子力学
- **课程助教：**担任上海纽约大学推荐系统(CSCI-SHU 381)，机器学习(CSCI-SHU 360)课程助教

实习经历

明汯投资　*量化研究实习生，高频创新自营组*　　2025/12 - 至今，中国上海

- 针对高流动性加密货币合约，从原始 L2 订单簿构造序列输入；通过二维卷积分别捕捉“时间模式/价位档位关系”，基于 Inception 进行多尺度特征融合后接时序回归头，实现收益预测全流程策略
- 用时序卷积网络替代递归结构以提升并行效率与梯度稳定性，扩展为多预测任务模型，通过交叉注意力和残差传递实现短期信息向长期预测的有效注入，监控实时订单簿建立做市策略中

灵均投资　*量化研究实习生，股票组*　　2025/8 - 2025/11，中国北京

- **机器学习截面预测：**结合 A 股 1k+ Alpha 因子库，设计优化模型输入输出，依次构建树模型和深度学习模型，滚动训练关键交易日并优化模型，实现相对 baseline 10%以上的提升，最优模型回测多头年化收益 40%+并纳入实盘
- **深度学习时序策略：**建立时间序列数据输入，独立完成多个完整 baseline 并进行 Stacking 集成，关注网络结构优化、损失函数设计和注意力架构，超参数调优并组合后回测年化收益 50%+，部分 baseline 模型已纳入实盘

蚂蚁集团（支付宝）　*大模型研究型实习生，百灵团队*　　2025/4 - 2025/8，中国上海

- 爬取数据、构造算子建立通用知识数据库；完整建立问题筛选和指标归纳模型，通过 PPL 等指标预筛选、迭代归纳、微调小模型以流程化优化数据，从而帮助 Ling 2.0 系列三种开源模型通用预训练/后训练并纳入 Tech Report
- 使用 2T 代码数据退火训练 Ling-coder-1B 模型，在主流代码 benchmark 上持平 Qwen2.5-Coder-1.5B；使用 1.8T 数学数据持续训练得到 Ling-math-1B，主流数学 benchmark 上超越 Qwen2.5-Math-1.5B 和 Qwen3-1.7B-Base

研究&项目

TS-Agent：基于强化学习的金融时间序列预测 Agent 框架 | *CCF-B 一作&通讯*　　2025/6 - 2025/9

- 设计探索增强微调机制，通过 GLM 和 Deepseek 生成千余条专家轨迹，对 Qwen2.5-14B 预训练扩展策略空间
- 设计复合奖励函数分步强化学习，提升复杂建模过程的样本效率，在多个金融任务上超越更大规模的基线模型

LNG 现货运费的多重分形特征：洞见、预测与交易策略 | *SCI 二区共一*　　2024/2 - 2024/9

- 基于 MF-DFA 等计算和多峰分析验证 LNG 现货运费多重分形性，建立谱分解成分、长程相关性强度等因子信号
- 使用时序方法进行 LNG 期货收益预测，结合 Hurst 指数等指标实现技术策略切换，回测年化收益率超 36%

用于体数据与实时流式数据的零样本 OCT 分割 | *SPIE 2025 会议*　　2024/1 - 2024/5

- 实现基于提示的 OCT 分割流程，支持体数据与在线流式推理，减少跨设备/协议场景下对重新标注与再训练的依赖；同时筛选足量病理临床视频帧冻结 backbone 训练 Mask Decoder，在可部署规模的分割模型中实现 SOTA

Optiver - Trading at the Close　　2023/9 - 2024/3

- 基于订单簿和拍卖薄数据，挖掘高频市场微观结构因子，包括买卖不平衡度、价量三重比率、参考价位滞后/差分、统计矩、订单深度加权价差及波动率代理，结合时序差分与滚动窗口聚合，实现因子有效性验证与噪声过滤
- 构建 LightGBM 预测模型，时序滚动训练并进行超参数优化，重训练后在验证集上 MAE 为 5.473

基于 BERT 的 ESG 实时指标和评级模型 | *上海交通大学优秀 PRP 项目*　　2022/6 - 2023/2

- 独立完成全部数据收集、模型微调和指标建立；统计归纳机构主流 ESG 体系，爬取雪球等交易平台的公众舆论和披露信息建立数据库并实时更新，微调 Bert 模型建立文本评级框架，对 3000+上市公司给出特定 ESG 评级
- 后续(2025 年)迁移到加密货币领域，从 X/Crypto 新闻源爬取文本输出日频情绪分数，与主流情绪指数基本相符

其他信息

语言能力：托福 108，普通话二甲

编程技能：Python，SQL，C++；在电气、数院多个院系-企业项目中负责核心工作，有较强工程能力；独立开发/讲解深度学习辅导项目，涉及医学图像、大模型从零开始系列、地理信息分析等方向进行假期授课

兴趣爱好：围棋(*AlphaGo* 激起了我学习 AI 的兴趣)，扑克，篮球，健体，旅行

Shuo Yin

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EDUCATION

Tsinghua University, School of Economics and Management **Beijing, Sept 2025-Jun 2027 (Expected)**

Master of Finance

- Current Courses: Financial Derivatives, Financial Data Analysis, Introduction to FinTech, LLM and Gen AI

Shanghai Jiao Tong University, School of Biomedical Engineering **Shanghai, Sept 2021-Jun 2025**

Bachelor of Engineering (Electronic & Computer Eng. Track)

- GPA: 3.8/4.0 | Merit Student Award | First Class Academic Scholarship | Outstanding Graduate
- Core Courses: Data Structures; Mathematical Methods; Signals & Systems; Statistics; Linear Algebra; Quantum Mechanics
- Teaching Assistant: Served as a TA for *Recommender Systems* and *Machine Learning* at Shanghai New York University

INTERNSHIP EXPERIENCES

Minghong Investment *Quantitative Research Intern* **Shanghai, Dec 2025-Present**

Conducted research on **crypto** machine learning, market-making and arbitrage strategies in the overseas HFT prop trading team

- Developed an end-to-end return forecasting pipeline for highly liquid crypto perpetual futures by converting L2 order book data into time-series inputs; leveraged multi-scale convolutional feature extraction and a regression head for prediction
- Optimized the model architecture to improve training stability and inference efficiency; extended to a multi-task setup and used attention to propagate short-term signals into longer-horizon forecasts, supporting real-time monitoring for market-making

Lingjun Investment *Quantitative Research Intern* **Beijing, Aug 2025-Nov 2025**

Worked primarily on model research and strategy development for A-share equities in the core stock team

- Machine Learning Cross-Sectional Forecasting Leveraged a 1,000+ alpha-factor library for China A-share equities; built tree-based and deep learning models with rolling training around key trading dates, and delivered >10% improvement over the baseline. The best model achieved 40%+ annualized long-only return in backtests and was deployed to live trading
- Deep Learning Time-Series Strategies: Built end-to-end time-series pipelines, implemented multiple baselines and a stacking ensemble; focused on architecture optimization, loss function design, and attention mechanisms, with hyperparameter tuning and model combination achieving 50%+ annualized return in backtests. Several baseline models were deployed to live trading

Ant Group (Alipay) *LLM Algorithm Intern* **Shanghai, Apr 2025-Aug 2025**

Contributed to Ling 2.0 by building corpora and training Ling-Coder-1B/Ling-Math-1B to validate dataset effectiveness

- Built a general knowledge corpus via web crawling and reusable data operators; implemented a streamlined pipeline for question filtering and metric summarization (PPL pre-screening, iterative consolidation, lightweight fine-tuning), improving data quality for pre-/post-training of three open-source Ling 2.0 models and contributing to the Tech Report
- Trained Ling-Coder-1B with 2T tokens of code data, matching Qwen2.5-Coder-1.5B on major code benchmarks; continued training Ling-Math-1B, outperforming Qwen2.5-Math-1.5B and Qwen3-1.7B-Base on mainstream math benchmarks

RESEARCH & PUBLICATION

TS-Agent: RL Empowered LLM Agents for Financial Time Series Forecasting **Jun 2025-Sept 2025**

- Developed TS-Agent, an RL-powered agent for financial time-series forecasting; leveraged an LLM-generated strategy pool for exploration-augmented fine-tuning and implemented stepwise RL with a custom module seeded from curated strategies.
- Improved strategy generation beyond baseline by over **10%**, with strategy performance close to top-tier LLMs

Multifractal Characteristics of LNG Spot Freight Rates: Insights, Forecasting & Trading Strategies **Feb 2024-Sep 2024**

- Built time-series models to forecast LNG futures returns; verified the multifractality of LNG spot freight rates using MF-DFA and multimodality analysis, and derived factor signals such as spectral components and long-range dependence strength
- Implemented regime-switching strategies using indicators (e.g., Hurst exponent), achieving 36%+ AR in backtests

Optiver -Trading at the Close **Sep 2023-Mar 2024**

- Developed high-frequency market microstructure factors from order book and auction data, including buy-sell imbalance ratios, price-volume triple barriers, reference price lags/differentials, among others
- Built LightGBM model with rolling training and hyperparameter optimization; achieved MAE of 5.473 on validation set

BERT-Based ESG Real-Time Metrics and Rating Model **Jun 2022-Feb 2023**

- Summarized mainstream institutional ESG frameworks, built and maintained a real-time database by scraping public data from platforms like Xueqiu, fine-tuned BERT to develop a text-based rating system, and delivered ESG ratings for 3,000+ companies
- Migrated the framework to the cryptocurrency sector in 2025: Generated daily sentiment scores from X/Crypto news feeds, with results aligning closely with leading industry sentiment indices

ADDITIONAL INFORMATION

- **Language:** English (TOEFL: 108), Chinese (Native)
- **Programming & Engineering:** Proficient in Python, SQL, and C++; led core development in multiple university–industry projects, demonstrating strong engineering execution. Independently developed and taught deep-learning tutoring modules (medical imaging, LLMs from scratch, and geospatial analytics) in intensive holiday courses
- **Interests:** Go (inspired by AlphaGo to pursue AI), poker, basketball, fitness training, and travel