PENG Yifeng

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EDUCATION BACKGROUND	
Chinese University of Hong Kong Shen Zhen (CUHK Shenzhen) Master of Finance	07/2023-09/2021
Hong Kong University (HKU) Master of Computer Science	08/2020-08/2021
Hunan University (HNU) Bachelor of Engineering in Computer Science and Technology	08/2016-06/2020

RESEARCH EXPERIENCE

Topic: Human-AI Alignment Problems in Financial Market

Tutor: CHEN Chen

Summary: Study on the application of large language model alignment in the field of financial knowledge, and pays attention to the problem of alignment caused by data contamination and degradation in the iterative process of large models.

Responsibility:

- ♦ Organizing seminar themes and led project discussions
- ♦ Deploying native open-source big language models
- ♦ Generating deliberately contaminated training corpora and iteratively train native models

Topic: Internet Public Opinion and Market Sentiment Fluctuations Tutor: SUI Pengfei

Summary: In recent years, with the development of artificial intelligence technology in the field of natural language processing, the potential value of alternative data in the financial field deserves exploring. This study takes the posts on eastmoney guba.com as the object to analyze whether comments on the Internet affect the efficiency of the market or affect rational trading.

Responsibility:

- ♦ Obtained opinion data on guba.com by constructing high-performance distributed asynchronous crawlers
- \diamond Carried emotion analysis to the opinions, building the emotion index
- ♦ Explored the relationship between sentiment measurement, market sentiment and rational trading

Topic: Volatility-based strategy on Chinese equity index ETF options Tutor: Ye Linlin

Summary: In recent years, there has been quick developments of derivative markets in China and standardized derivative trading have reached considerable volumes. Based on the discussion of relationship between the strategy's performance and market's volatility, a new strategy could be done by adjusting positions and exposure according to volatility forecasts.

Responsibility:

- \diamond Responsible for the Python implementation of volatility-based algorithm and optimization
- \diamond Assisted project paper writing

Topic: Track and Detection Algorithm optimization based on HiSilicon IP camera 01/2021-08/2021 **Tutor: Bill Luo**

Responsibility:

- \diamond Participated in the project as the project leader, drafted proposals and assigned work
- Hardware adaption and algorithm debugging, reduce the computational power consumption of classical target ∻

09/2022-12/2022

01/2022-06/2022

07/2023-present

Topic: Risk Control Eagle Eye System

Tutor: <u>Chen Haowen</u>

Summary: In cooperation with China Merchants Bank Changsha Branch, this jointly developed system (now in actual use) processed alternative financial data and build up Eagle Eye system, monitor real time negative internet finance information, analyze big data in finance, help financial risk control departments file risk intelligence on targeted enterprises, and guarantee risk control intelligentization.

Responsibility:

- ♦ Participated in the project as an applicant and a leader, drafted proposals and presented in two contests
- ♦ Assisted in building up Hadoop, tested system functions, expanded filter word database, and wrote data collecting module interface

Topic: Self-study System based on Deep Reinforcement Learning Tutor: <u>Li Zhiyong</u>

Responsibility:

- \diamond Was in full charge of the project from preparing application documents to presenting
- ♦ Edited ROS system to control the robot and capture real time surrounding images
- ♦ Used rplidarA2 laser radar to create 3D models, tried to reproduce the migration ability of the DRL algorithm

PREPRINTS (ON WORKING)

Yifeng, P. (2024). (Delivered) Internet sentiment exacerbates intraday overtrading, evidence from China. *Journal of Behavioral Finance*. arXiv preprint <u>arXiv:2404.12001</u>

Yifeng, P. (2024). Volatility-based strategy on Chinese equity index ETF options. arXiv preprint arXiv:2403.00474.

Chen, C., Yifeng, P., Rui, R., Heran, Ma. (On Working). Tainted Future of Language Models, Collapse and Degeneration.

WORK/INTERNSHIP EXPERIENCE

School of Management and Economics, The Chinese University of Hong Kong, Shenzhen 07/2023-present Research Associate (Alignment Project Team)

- \diamond Responsible for data contamination and large model degradation research
- ♦ Assisting Professor CHEN Chen in undergraduate teaching works and bi-weekly seminar
- ♦ Participating in textbook writing and proofreading

Guangzhou Nonglian Kechuang Information Technology Co., Ltd.06/2019-08/2019Software Developer Internship06/2019-08/2019

- ♦ Worked in maintenance and update of platform functions
- \diamond Assisted in testing, collecting and organizing data

CAMPUS ACTIVITIES

Shaw College Tutor in CUHK Shenzhen

- ♦ Responsible for the undergraduate life affairs of Floor 10-11, Building D, Shaw College
- ♦ 2023 Shaw Spirit Award for responsible tutor

Long-term Volunteer in Longgang District, Shenzhen

- ✤ Initiator of the CUHK Shenzhen Micro-light public welfare activity
- $\Leftrightarrow \quad \text{Vice President of Animal Protection Society in CUHK Shenzhen}$

Volunteer leader in 2019 China Space Day

- \diamond Fixed up meetings, guided attendants, and managed an 8-people team
- ♦ Won an honor of Excellent Volunteer

05/2018-05/2020

01/2019-06/2020

5/2022

05/2022-present

09/2021-present

HU Student Union Committee Member

- ♦ Monitored chairman committee jobs and arranged regular appraisal
- ♦ Held student representative meetings and collected feedback to report
- ♦ Cooperated with representatives, organized survey, and collected feedback to report in writing

College Youth League Cadre

- ♦ Maintained students' rights and set complaint columns to solve problems
- ♦ Summarize dorm inspection data and announced weekly
- ♦ Operated College WeChat public account

COMPUTER SKILLS

C++, Python, Eviews, R, Linux, Hadoop, Office, Prompt Engineering for LLMs

HONORS

\diamond	Dean List of Shenzhen Finance Institute (SFI)	11/2023
\diamond	Shenzhen Finance Institute (SFI) Second Class Scholarship	11/2023
\diamond	Shaw Spirit Award	10/2023
\diamond	Excellent Student Union Committee Member	05/2020
\diamond	First Prize for HU Internet+ Contest	05/2019
\diamond	Special Award for No. 13 Hunan Province Challenge Cup Contest	06/2019
\diamond	HU Second Scholarship	12/2017&12/2019
\diamond	HU Excellent Student Cadre	10/2018
\diamond	Second Prize for HU Engineering Training Contest	09/2018

10/2016-10/2018