Zhang Tianyi

Tel: +86-150-4407-3647 | Email: zty444688231@163.com | Website: www.42x.online

EDUCATION BACKGROUND

National University of Singapore *Master's Degree*

- School of Computing Master of Science in Digital Financial Technology 08/2025-12/2026

Jilin University *Bachelor's Degree*

- **Major:** School of Communication Engineering Communication Engineering Rank:18% 09/2021–06/2025
- **Minor**: School of Economy Finance 09/2022–06/2024
- **Mico Major:** School of Mathematics Statistics and Smart Data 09/2024–06/2025
- **Scholarship:** Third-class Scholarship (2022 & 2023 & 2024)
- **Jilin University Quantitative Investment Association**, *Head of the Research Department* 09/2023-06/2025

INTERNSHIP EXPERIENCE

China Merchants Bank *Intern – System Development, Information Technology Department* 01/2024–02/2024

- **Work Description:** Responsible for developing and maintaining VBA automation programs to improve work efficiency and reduce errors; participated in designing a blockchain- and NFT-based honor system to support employee evaluation and incentive mechanisms; optimized code structure to enhance maintainability; implemented data backup and recovery to ensure system stability and data integrity.

China Everbright Bank *Elite Internship Program* 02/2023

- Recognized as an Outstanding Intern and personally recommended by the Bank President**.**
- **Work Description:** Participated in banking business process research and analysis, supported multidimensional data collection and decision-making; promoted optimization of customer service processes to enhance customer experience.

RESEARCH EXPERIENCE

National University of Singapore Summer School 07/2023

- Served as the team leader and reported that the first person in the group received an A Distinction and was recommended by Professor Dr. Edmund Low. Received recognition upon notification within Jilin University
- **Research Content:** Linear Regression Analysis of PM10 and PM2.5 Correlation in German Cities

Jilin University ***Undergraduate Research Training Program*** 12/2023–06/2025

- **Research Content:** Signal Type Recognition Algorithm Based on Invariant Scattering Convolutional Network
- Designed and implemented a modulation recognition algorithm based on the Invariant Scattering Convolution Network (ISCN), using scattering coefficients as feature inputs. The algorithm combines Long Short-Term Memory (LSTM) networks, sub-spectral normalization, and residual modules to enhance signal recognition accuracy. To mitigate noise interference, a wavelet threshold denoising step was integrated, significantly improving the stability and accuracy of signal recognition.

The Chinese University of Hong Kong 01/2023

- Received an A+ and was recommended by Professor Wu Jing to participate in the 2nd International Conference on Digital Economy and Management Science (CDEMS 2024). The paper has been included in the CPCI CNKI Google Scholar.
- **Research Content:** Unleashing NFT Liquidity with DeFi Current State of NFTFi Translation
- Studied the financialisation paths of NFTs by systematically reviewing four major application areas: NFT lending, derivatives, fractionalization, and leasing. Conducted an in-depth analysis of the Blend protocol's innovative mechanisms for improving NFT liquidity. Summarized how DeFi technologies address key challenges in NFT valuation and capital inefficiency.

Central University of Finance and Economics 02/2023–04/2023

- Achieved an A grade in the program and received a commendation from Professor Gu Weiyu.
- ***Research Content:*** Blockchain and Federated Learning-Based Framework for Supply Chain Management
- Designed a collaborative supply chain management framework that integrates blockchain with federated learning, enabling multiple parties to perform joint model training without exposing raw data. Leveraged blockchain to ensure data integrity, traceability, and trust in the training process, effectively addressing issues such as data silos, privacy leakage, and inefficiency in traditional supply chains.

EXTRACURRICULAR ACTIVITIES

Alibaba ModelScope AI Large Model & AIGC Project Training Camp 10/2024

- Served as team leader, led the team to win first prize, and delivered the acceptance speech on behalf of the winning team.
- **Competition Description:** Trained LoRA based on the Kolors model to achieve efficient transfer of diverse artistic styles; generated ≥8 coherently styled images to create a complete visual story; systematically evaluated the aesthetics and coherence of LoRA-generated styles to quantify model performance.

China Mobile M-Zone AI+ Innovation Program for Universities 12/2024

- Northeast Regional First Prize, AI Technology Track Outstanding Award at the National Finals, Nankai University
- **Competition Description:** Designed and implemented an AI model based on human pose recognition to accurately classify Baduanjin and Wuqinxi movements, enhancing robustness in feature extraction and recognition of complex actions; developed a spatiotemporal fine-grained analysis model that integrates skeletal features and motion trajectories to objectively score the accuracy of movements, addressing the challenges of quantifying traditional manual assessments.

ADDITIONAL INFORMATION

Languages: Chinese (Native), English (IELTS 6.5 ; L:6 R:7.5 W:6 S:5.5)
Professional Certificate: AIGC Application Development Engineer, China Software Industry Association
Technical Skills: Proficient in Go, C, C++, Java, Python (PyTorch), SQL, MATLAB, R, and Web (HTML, CSS, JavaScript). Familiar with Hadoop for distributed data processing and Hyperledger Fabric for blockchain development.
Investment experience: Extensive investment background across A-shares, Hong Kong equities, and cryptocurrencies. Early adopter of China's digital collectibles market and active participant in a wide range of international NFT projects.