

Education

Xinjiang University

Urumqi, Xinjiang

Bachelor of Science Degree, Mathematics and Applied Mathematics. 3.68/4

2023–Present

Relevant Coursework: Mathematical Analysis, Analytic Geometry, Partial Differential Equations, Functional Analysis, etc.

Joint Program: Tsinghua University, Tsien Excellence in Engineering Program - X-Institute

Shenzhen, Guangdong

Enhanced Student Research Training, Open Research for Innovation Challenges, etc

2024–Present

Zhounan High School

Changsha, Hunan

Zhounan Star (the highest honor of the school), Shizhao Zhou Subject Competition Award, Peking University Summer

Camp Participant, Five Excellences Model Student, Star of Excellence, AMC 12 Second Place

2020–2023

Research Experience

Chinese Academy of Sciences Innovation Practice Training Program (Principal Investigator) 2024.11–2025.9

- Led research project on extracting and analyzing global heatwave adaptation factors using multimodal BERT models
- Integrated text, image, and structured data analysis to identify key factors affecting heatwave adaptation
- Developed theoretical and data support for global heatwave response strategies under Prof. Ge Yong's guidance

Provincial Undergraduate Innovation Training Program (Principal Investigator)

2024.3–2025.6

- Conducted research on generating circularity of n-fold Cartesian product graphs of complete graphs
- Extended existing research beyond 2-3 vertex complete graphs to analyze graphs with 4+ vertices
- Collaborated with Associate Prof. Eminjan Sabir on advanced graph theory concepts

Tsinghua University Tsien Excellence in Engineering Program ESRT Project (Principal Investigator)

2024.8–2025.1

- Developed innovative approach converting protein sequences into musical encodings
- Achieved 91.04% classification accuracy using ML models on 2000+ protein mappings
- Established correlation between musical harmony indices and protein functionality

Professional Experience

Institute of Software, Chinese Academy of Sciences - Huawei Mindspore (Research Intern)

2024.9 – 2025.3

- Implemented VGG19-based Pollock style transfer for fractal and turbulent feature extraction
- Applied machine learning and AI techniques for artistic style analysis

Selected Publications

- Luo, Z., Wang, X., Wang, Y., Zhang, H., & Li, Z. (2024). A Personalized MOOC Learning Group and Course Recommendation Method Based on Graph Neural Network and Social Network Analysis. *Journal Of Computing In Higher Education (under review, co-first author)*
- Wang, Y., Wang, Xu., Jiazhao, Pan. (2024). Fractal and Turbulent Feature Extraction and NFT Label Generation for Pollock Style Migration Paintings Based on VGG19. *Computer Vision and Image Understanding (under review, first author)*
- Wang, X., Xu, L., Wang, Y., Dong, Y., Li, X., Deng, J., & He, R. (2024). Octopus Inspired Optimization Algorithm: Multi-Level Structures and Parallel Computing Strategies. *Machine Intelligence Research (under review, Corresponding author)*

Awards and Honors

- National 17th Place, Alibaba Cloud University Student Competition 2024
- National Third Prize, 14th APMCM Asia-Pacific Mathematical Modeling Competition 2024
- 7th Place, Xinjiang “Tianshan Network Cup” Cybersecurity Skills Competition 2023
- 15th Place, National Amateur Go Chess King Championship 2024

Skills & Interests

Technical Skills: Python, C/C++, MATLAB, HTML, JavaScript, CSS

Languages: Chinese (Native), English (Professional)

Research Areas: Machine Learning, Bioinformatics Analysis, Mathematical Modeling, Graph Neural Networks

Interests: Go (Weiqi), Photography, Cycling, Programming, Fishing