

EDUCATION

The State Key Lab. LIESMARS, Wuhan University	Wuhan, China
<i>M.Sc. in Cartography and Geographic Information Systems</i>	2023 - 2026 (expected)
<ul style="list-style-type: none"> • GPA: 3.55/4.00, Average Score: 89.40, IELTS: 7.0(6.0) • Advisor: Prof. Xianwei Zheng • Research area: Computer Vision and Geographical 3D Reconstruction 	
School of Remote Sensing and Information Engineering, Wuhan U	Wuhan, China
<i>B.Eng. in Remote Sensing Science and Technology</i>	2019 - 2023
<ul style="list-style-type: none"> • GPA: 3.75/4.00, Average Score: 88.90. 	

PUBLICATIONS

1. Xu Pan, Zimin Xia, Xianwei Zheng. **Scale-aware Co-visible Region Detection for Image Matching.** *ISPRS Journal of Photogrammetry and Remote Sensing*, 2025.
 - Addressed large scale gaps in image matching via a hierarchical framework with Scale Head Attention for robust cross-scale correlation, achieving up to +8.41% precision gain over benchmarks.
2. Xu Pan, Qiyuan Ma, Jintao Zhang, Xianwei Zheng. **SAMatcher: Segment Anything Co-Visible for Robust Feature Matching.** *(In Preparation)*, 2026.
 - Enhances image matching under scale variation by leveraging SAM priors to detect semantically consistent co-visible segments and constrain hierarchical matching.

PROJECTS

SCoDe	
<i>Github Repo: github.com/TwSphinx54/SCoDe</i>	2023.10 - 2024.03
Intelligent Interpretation Platform for Remote Sensing Images Based on Baidu PaddlePaddle	
<i>Github Repo: github.com/TwSphinx54/I2RSI</i>	2022.03 - 2022.08

INTERNSHIPS

A*STAR - Centre for Frontier AI Research (CFAR) Singapore	2025.08 - present
<ul style="list-style-type: none"> • Pioneered a spatial prior for flow-based VLA models for complex environments, implicit spatial awareness that enhances cross-modal grounding and improves spatial reasoning over challenging scenes. • Designed a Flow-Matching-based reinforcement learning framework, enabling differentiable trajectory optimization with trustworthy dense action rewarding and achieving more robust vision-language-action alignment. 	
Baidu, Inc. - Intl. Tech R&D Dept. Shenzhen, China	2024.12 - 2025.03
<ul style="list-style-type: none"> • Developed a novel DiT-based video generation framework with key-frame conditioning for controllable, infinite-length synthesis. • Improved the visual fidelity of rendered text in image generation by designing specialized attention mechanisms. • Contributed to the SynClub AI chat app by evaluating SOTA image generation models and optimizing text-to-image components for better performance and quality. 	

ACADEMIC ACTIVITIES

2025 Annual Academic Conference on Photogrammetry and Remote Sensing, Chinese Society for Geodesy, Photogrammetry and Cartography (CSGPC)

Kunming, China

2025.07.28 - 2025.07.30

AWARDS AND HONORS

- Outstanding Graduate Student, Wuhan University 2025.11
- Graduate Academic Excellence Scholarship, Wuhan University 2025.11
- Graduate Academic Excellence Scholarship, Wuhan University 2024.11
- Outstanding Student Leader, Wuhan University 2024.10
- Outstanding Student Club Leader, Wuhan University 2024.08
- Active Contributor to Social Activities,
School of Remote Sensing and Information Engineering, Wuhan University 2023.05
- National Second Prize,
China Software Cup College Student Software Design Competition 2022.08
- Honorable Mention, Mathematical Contest In Modeling 2022.03
- Third Prize, Asia and Pacific Mathematical Contest in Modeling 2021.12
- First Prize in Hubei Division,
China Undergraduate Mathematical Contest in Modeling 2021.10
- Outstanding Student, Wuhan University 2021.09
- Bronze Medal,
China Collegiate Algorithm Design & Programming Challenge Contest 2021.03
- Second Prize in Final, Translation & Interpreting Contest of Hubei Province 2020.05

SKILLS

Languages: Mandarin, English (IELTS 7.0).

Programming: Python, C++, MATLAB, HTML, CSS, JavaScript, C#, SQL, R.

Soft Skills: Leadership, Project Management, Event Management, Writing, Public Speaking.

CERTIFICATES

System Integration Project Management Engineer

Qualification Certificate of Computer and Software Technology Proficiency

Certificate of Level 4 in Network Engineer

National Computer Rank Examination

Certificate of Level 3 in Network Technology

National Computer Rank Examination

Certificate of Level 3 in Database Technology

National Computer Rank Examination

VOLUNTEER EXPERIENCE

Chairman of: The 22nd LIESMARS Graduate Student Union.

Director of: GeoScience Café Operation Center.

Volunteer of: 2023/2024 International Graduate Workshop on Geo-Informatics,

The 21st China Ocean Color Conference.