

EDUCATION

State Key Lab. LIESMARS, Wuhan University

Wuhan, China

M.Sc. in Cartography and Geographic Information Systems

2023 - 2026 (expected)

- GPA: 3.55/4.00, Average Score: 89.40, IELTS: 7.0(6.0)
- Research area: Computer Vision and 3D Reconstruction | Advisor: Prof. Xianwei Zheng

School of Remote Sensing and Information Engineering, Wuhan University

Wuhan, China

B.Eng. in Remote Sensing Science and Technology

2019 - 2023

- 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 (JCR Q1 2/98, IF12.2)*, 2025. <https://doi.org/10.1016/j.isprsjprs.2025.08.015>
2. Xu Pan, Qiyuan Ma, Jintao Zhang, Xianwei Zheng. **SAMatcher: Co-Visibility Modeling with Segment Anything for Robust Feature Matching.** *IEEE Transactions on Geoscience and Remote Sensing (In Preparation)*, 2026.
3. Xu Pan, Zhenglin Wan, Xingrui Yu. **Spatially-Aware Reinforcement Learning for Flow-Matching Vision-Language-Action Models.** *(In Preparation)*, 2026.

PROJECTS

Intelligent Interpretation Platform for Remote Sensing Images Based on Baidu PaddlePaddle

2022.03 - 2022.08

Github Repo: github.com/TwSphinx54/I2RSI

INTERNSHIPS

A*STAR - Centre for Frontier AI Research (CFAR) | Singapore

2025.08 - present

- 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 rewarding and achieving more robust vision-language-action alignment.

Baidu, Inc. - International Technology R&D Department | Shenzhen, China

2024.12 - 2025.03

- 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 Conference on Photogrammetry and Remote Sensing, Chinese Society

2025.07.28 - 07.30

for Geodesy, Photogrammetry and Cartography (CSGPC) | Kunming, China

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
- **Wuhan University Class C Scholarship**, Wuhan University 2022.10
- **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.