

## EDUCATION

	<b>The State Key Lab. LIESMARS, Wuhan University</b> <i>M.Sc. in Cartography and Geographic Information Systems</i>	Wuhan, China 2023 - 2026 (expected)
	• 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	

  

	<b>School of Remote Sensing and Information Engineering, Wuhan U</b> <i>B.Eng. in Remote Sensing Science and Technology</i>	Wuhan, China 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*, 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: 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

	<b>Intelligent Interpretation Platform for Remote Sensing Images Based on Baidu PaddlePaddle</b> <i>Github Repo: <a href="https://github.com/TwSphinx54/I2RSI">github.com/TwSphinx54/I2RSI</a></i>	2022.03 - 2022.08
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## INTERNSHIPS

	<b>A*STAR - Centre for Frontier AI Research (CFAR)   Singapore</b>	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 action rewarding and achieving more robust vision-language-action alignment.	
	<b>Baidu, Inc. - Intl. Tech R&amp;D Dept.   Shenzhen, China</b>	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 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
- **Wuhan University Class C Scholarship**, Wuhan University 2022.10
- **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.