

## EDUCATION

<b>Wuhan University   State Key Lab. LIESMARS</b> <i>M.Sc. in Cartography and Geographic Information Systems</i>	Wuhan, China 2023.09 - 2026.06
• GPA: 3.55/4.00, Average Score: 89.40/100, IELTS: 7.0(6.0) • Research area: Computer Vision and 3D Reconstruction   Supervisor: Prof. Xianwei Zheng	

<b>Wuhan University   School of Remote Sensing and Information Engineering</b> <i>B.Eng. in Remote Sensing Science and Technology</i>	Wuhan, China 2019.09 - 2023.06
• GPA: 3.75/4.00, Average Score: 88.90/100	

## PUBLICATIONS

1. Xu Pan, Zhenglin Wan, Xingrui Yu, Xianwei Zheng, Youkai Ke, Ming Sun, Rui Wang, Ziwei Wang, Ivor Tsang. **SA-VLA: Spatially-Aware Reinforcement Learning for Flow-Matching Vision-Language-Action Models.** (*Under Review at ICML*), 2026. Available at [arXiv](https://arxiv.org/abs/2601.01240).
2. Xu Pan, Zimin Xia, Xianwei Zheng. **Scale-aware Co-visible Region Detection for Image Matching.** *ISPRS Journal of Photogrammetry and Remote Sensing (JCR Q1, IF 12.2)*, 2025. <https://doi.org/10.1016/j.isprsjprs.2025.08.015>
3. Ming Sun, Rui Wang, Xingrui Yu, Lihua Jing, Hangyu Du, Zhenglin Wan, Xu Pan, Ivor Tsang. **SleeperVLA: Towards Backdoor-Based Ownership Verification for Vision-Language-Action Models.** (*Under Review at ICML*), 2026.
4. Xu Pan, Qiyuan Ma, Jintao Zhang, He Chen, Xianwei Zheng. **SAMatcher: Co-Visibility Modeling with Segment Anything for Robust Feature Matching.** *IEEE Transactions on Geoscience and Remote Sensing (Under Review)*, 2026.

## PROJECTS

<b>Intelligent Interpretation Platform for Remote Sensing Images Based on Baidu PaddlePaddle</b>	2022.03 - 2022.08
⌚ TwSphinx54/I2RSI	
<b>Web-based Global Natural Disaster Assessment System</b>	2022.05 - 2022.09
⌚ TwSphinx54/GNDAS	

## EXPERIENCES

<b>Research Assistant @ A*STAR   Centre for Frontier AI Research (CFAR)   Singapore</b>	2025.08 - present
• Pioneered spatially-aware reinforcement learning adaptation for flow-based VLA models, preserving implicit spatial inductive bias through fused geometric prior and preventing degradation under distribution shifts.	
• Designed geometry-aligned dense rewards and spatially-conditioned exploration, enabling stable RL fine-tuning, superior zero-shot spatial generalization, and robust transferable behaviors in complex manipulation scenes.	
<b>Research Intern @ Baidu, Inc.   International Technology R&amp;D Dept.   Shenzhen, China</b>	2024.12 - 2025.03
• Developed DiT-based framework for controllable, arbitrarily long video generation via key-frame conditioning.	
• Improved the visual fidelity of rendered text in image generation by designing specialized attention mechanisms.	
• Contributed to the SynClub AI chat app through assessment of frontier multimodal generative models and optimization of text-to-image/video modules, delivering improved performance and higher-quality outputs.	

## ACADEMIC ACTIVITIES

2025 Annual Conference on Photogrammetry and Remote Sensing, Chinese Society 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 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 Organization, Public Speaking, Design & Editing

## 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*

## SERVICE AND LEADERSHIP

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| <b>Reviewer</b>  | International Conference on Machine Learning (ICML'26)  |
| <b>Member</b>    | ISPRS Student Consortium (ISPRS SC)   |
| <b>Chairman</b>  | The 22nd LIESMARS Graduate Student Union  |
| <b>Director</b>  | GeoScience Café Operation Center  |
| <b>Volunteer</b> | 2023/2024 International Graduate Workshop on Geo-Informatics<br>The 21st China Ocean Color Conference |