

EDUCATION

- The 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: 89.69.
 - Advisor: Prof. Xianwei Zheng
 - Research area: Computer Vision and Geographical 3D Reconstruction
- School of Remote Sensing and Information Engineering, Wuhan U** 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*, 2025.
 - Addressed the challenge of matching images with large scale gaps by detecting and aligning co-visible regions using a hierarchical framework with Scale Head Attention for robust cross-scale feature correlation.
 - Achieved up to +8.41% precision gain over state-of-the-art methods on diverse large-scale image matching benchmarks.
2. **Xu Pan**, Qiyuan Ma, Jintao Zhang, Xianwei Zheng. SAMatcher: Segment Anything Co-Visible for Robust Feature Matching. (*In Preparation*), 2026.
 - Targets robust image matching under significant scale variation by identifying semantically consistent, co-visible object segments.
 - Leverages SAM priors to detect co-visible object segments and constrain hierarchical matching within semantically aligned regions.

PROJECTS

- SCoDe**
Github Repo: github.com/TwSphinx54/SCoDe 2023.10 - 2024.03
- Intelligent Interpretation Platform for Remote Sensing Images Based on Baidu PaddlePaddle**
Github Repo: github.com/TwSphinx54/I2RSI 2022.03 - 2024.01

INTERNSHIPS

- A*STAR - Centre for Frontier AI Research (CFAR) | Singapore** 2025.08 -
- Baidu, Inc. - Intl. Tech R&D Dept. | 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 of the Chinese Society for Geodesy, Photogrammetry and Cartography (CSGPC), Commission on Photogrammetry and Remote Sensing <i>Kunming, China</i>		2025.07.28 - 2025.07.30
AWARDS AND HONORS	<ul style="list-style-type: none"> • Graduate Academic Excellence Scholarship, The State Key Lab. LIESMARS, Wuhan University 2024.12 • 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 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. 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 <i>Qualification Certificate of Computer and Software Technology Proficiency</i> Certificate of Level 3 in Database Technology <i>National Computer Rank Examination</i> Certificate of Level 3 in Network Technology <i>National Computer Rank Examination</i> Certificate of Level 4 in Network Engineer <i>National Computer Rank Examination</i>		
VOLUNTEER EXPERIENCE	Volunteer of: 2023 International Graduate Workshop on Geo-Informatics, the 21st China Ocean Color Conference. Chairman of: the 22nd LIESMARS Graduate Student Union. Director of: GeoScience Café Operation Center.		