Xu Pan M.Sc.

(+86) 153-7704-6056
panxurs@whu.edu.cn
Portfolio: xupan.top
in LinkedIn ⚫ GitHub ℝᴳ ResearchGate 𝕏 X

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 Secore: 89.69.
- Advisor: Prof. Xianwei Zheng
- Research area: Computer Vision and Geographical 3D Reconstruction

School of Remote Sensing and Information Engineering, WuhanU Wuhan, China

B.Eng. in Remote Sensing Science and Technology 2019 - 2023

- GPA: 3.75/4.00, Average Secore: 88.90.

Publications

1. **Xu Pan**, Zimin Xia, Xianwei Zheng. Scale-aware Co-visible Region Detection for Hierarchical Image Matching. *ISPRS Journal of Photogrammetry and Remote Sensing (Under Review)*, 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. *The IEEE/CVF Conference on Computer Vision and Pattern Recognition (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

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

SCoDe
Github Repo: github.com/TwSphinx54/SCoDe 2023.10 - 2024.03

Internships

Baidu, Inc. - Intl. Tech R&D Dept. | Shenzhen, China 2024.12 - 2025.03
- Developed a novel DiT-based video generation method with key-frame guidance for controllable, infinite-length synthesis, improving text-visual consistency via enhanced 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.

Awards and Honors

- **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
Qualification Certificate of Computer and Software Technology Proficiency

Certificate of Level 3 in Database Technology
National Computer Rank Examination

Certificate of Level 3 in Network Technology
National Computer Rank Examination

Certificate of Level 4 in Network Engineer
National Computer Rank Examination

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.