SHILI CHEN

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Information Faculty, Wuhan University, Wuhan, Hubei, China

EDUCATION

Wuhan University

Wuhan, Hubei

M.E., Photogrammetry and Remote Sensing

Expected June 2024

- Research Interests: Moving objects processing, including detection, tracking, and segmentation.
- Dissertation: "Object Tracking on Satellite Video"

Wuhan University

Wuhan, Hubei

June 2021

B.E., Remote Sensing Science and Technology

- Major: Geographic Information Engineering
- Thesis: "Vehicle Tracking on Satellite Video"

PROFESSIONAL & STUDY EXPERIENCE

Wuhan University

Wuhan, Hubei

- Research Assistant to Professor Taoyang Wang in projects on object state awareness on satellite
 video. Participated in project application, experiment design, evaluation, and review. Mainly
 supported research on object tracking, detection and trajectory association. October 2020 to
 Present.
- Research Assistant to Professor Taoyang Wang in edition of the manuscript of "Optical satellite video data processing and application", a monograph wrote by Professor Taoyang Wang, October to December 2020.
- *Panel Organizer* of one Undergraduate Training Program for Innovation and Entrepreneurship. Proposed a program named "Anti-Theft Positioning and Tracking System based on Real-Time Image and GNSS", supervised by Professor Xinghua Li. Organized the whole process of the program and accomplished it. Published a China software copyright. March 2019 to June 2020.
- *Panel Organizer* on the Mathematical/Interdisciplinary Contest in Modeling (MCM/ICM), organized by Consortium for Mathematics and its Applications (COMAP). Designated as successful participant, 2019 and 2020.

The Hong Kong Polytechnic University

Hong Kong

• Exchange Student at department of Land Surveying and Geo-Informatics, June to July 2019.

PUBLICATIONS

- S. Chen et al., "Vehicle Tracking on Satellite Video Based on Historical Model," in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 15, pp. 7784-7796, 2022, doi: 10.1109/JSTARS.2022.3195522.
- T. Wang, J. Hong, Y. Han, Z. Guo, **S. Chen**, *et al.*, "AOSVSSNet: Attention-Guided Optical Satellite Video Smoke Segmentation Network," in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 15, pp. 8552-8566, 2022, doi: 10.1109/JSTARS.2022.3209541.

WORKS IN PROCESS

- "HTTS: Learning Head-Tail Transformer for Object Tracking on Satellite Video." Article manuscript in progress, to be submitted for publication in winter 2024.
- "A Method for Vehicle Tracking on Optical Satellite Video." China Patent. Under substantive examination.

SOFTWARE COPYRIGHT

- "Digital Map Platform for Chinese Entertainment Industry V1.0." China Software Copyright, No. 5814518, Jun. 2020. Programmed in Java/Javascript/HTML/CSS.
- "Library Anti-Theft System V1.0." China Software Copyright, No. 5814244, Apr. 2020. Programmed in Java/Javascript/HTML/CSS.
- "Geographic Information Platform for Chinese Delicacy V1.0." China Software Copyright (contributing author), No. 5502943, Nov. 2019. Programmed in Java/Javascript/HTML/CSS.

AWARDS

Graduate Fellowship, Wuhan University	2021-24
Outstanding Graduates, School of RS. and Information Engineering, Wuhan University	2021
Outstanding Thesis for Bachelor's Degree, Wuhan University	2021
The Third Prize Scholarship, Wuhan University	2019-20
Excellent Undergraduates, Wuhan University	2019-20

SKILLS & LANGUAGES

- Proficient in Python/MATLAB/C
- Basic use of Java/Javascript/HTML/CSS
- Proficient in MS Office application software
- Proficient in Geographic Information Systems and related software (ArcGIS)
- Chinese (Mandarin): Native; English: Good user, IELTS 7.0 overall (minimum 6.5)

REFERENCES

Taoyang Wang, Associate Research Fellow School of Remote Sensing and Information Engineering, Wuhan University 129 Luoyu Road, Wuhan 430079, Hubei, China wangtaoyang@whu.edu.cn Xinghua Li, Associate Professor School of Remote Sensing and Information Engineering, Wuhan University 129 Luoyu Road, Wuhan 430079, Hubei, China lixinghua5540@whu.edu.cn