Yujiao Shi, The Australian National University

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Education

2018 – Now **Ph.D., Australian National University, Canberra, Australia.**

Research topic: Satellite image based geo-localization, Novel view synthesis.

Supervisor: Prof. Hongdong Li, Dr. Xin Yu, Dr. Dylan Campbell.

2014 – 2017 M.S., Nanjing University of Posts and Telecommunications, Nanjing, China.

Research topic: Evolutionary computation.

Supervisor: Prof. Hao Gao

2010 – 2014 B.S., Nanjing University of Posts and Telecommunications, Nanjing, China.

Major: Automation.

Research Communications

2022 Jan - Now

■ Facebook Reality Lab.

Research topic: burst image super-resolution.

Research Publications

Journal Articles

- **Shi, Yujiao**, Campbell, Dylan, Yu, Xin, & Li, Hongdong. (2022). Geometry-guided street-view panorama synthesis from satellite imagery. *IEEE TPAMI*.
- **Shi, Yujiao**, Yu, Xin, Liu, Liu, Campbell, Dylan, Koniusz, Piotr, & Li, Hongdong. (2022). Accurate 3-dof camera geo-localization via ground-to-satellite image matching. *IEEE TPAMI*.

Conference Proceedings

- **Shi, Yujiao** & Li, Hongdong. (2022). Beyond cross-view image retrieval: highly accurate vehicle localization using satellite image. In *CVPR* 2022.
- 2 Shi, Yujiao, Li, Hongdong, & Yu, Xin. (2021). Self-supervised visibility learning for novel view synthesis. In *CVPR* 2021.
- **Shi, Yujiao**, Yu, Xin, Campbell, Dylan, & Li, Hongdong. (2020). Where am i looking at? joint location and orientation estimation by cross-view matching. In *CVPR* 2020.
- 4 **Shi, Yujiao**, Yu, Xin, Liu, Liu, Zhang, Tong, & Li, Hongdong. (2020). Optimal feature transport for cross-view image geo-localization. In *AAAI*, *2020*.
- **Shi, Yujiao**, Liu, Liu, Yu, Xin, & Li, Hongdong. (2019). Spatial-aware feature aggregation for image based cross-view geo-localization. In *NeurIPS* 2019.

Skills

Programming | Python, Matlab, Tensorflow, Pytorch.

Research Projects

- 2018 − 2019 **Spatial CCTV:** City 3D modeling, object detection, and model & video registration.
 - **AUW navigation:** Image-based geo-localization and way-finding.

Awards

2021	■ CVPR 2021 Outstanding Reviewer
2018	ANU ACRV Top-Up Scholarship
2016	■ Post-graduate First-class Scholarship Outstanding Post-graduate Scholarship
2015	Post-graduate First-class Scholarship Outstanding Post-graduate Scholarship
2014	■ Post-graduate First-class Scholarship
2013	■ Under-graduate Second-class Scholarship
2012	■ Under-graduate First-class Scholarship "Three Good" Student Model Scholarship
2011	■ Under-graduate Second-class Scholarship "Three Good" Student Scholarship

Teaching Experience

- 2019 2021 **Teaching assistant:** Computer Vision (ENGN4528/6528), Research school of CECS, Australian National University.
- 2015 2016 **Teaching assistant:** Artificial Intelligence, College of Automation, Nanjing University of Posts and Telecommunications.