Wei Mao, Australian National University

https://wei-mao-2019.github.io/home/

in https://www.linkedin.com/in/wei-mao-anu/

115 North Rd, Canberra, Australia, ACT 2601

Education

2018 - 2022 Ph.D., Australian National University, Canberra, Australia.

Research topic: 3D Human Understanding

Supervisor: Dr. Miaomiao Liu.

Working closely with Dr. Mathieu Salzmann from EPFL

Thesis: Human Motion Prediction: From Deterministic to Stochastic

2016 – 2018 Master of Computing (advanced), Australian National University, Canberra, Australia.

Specialisations: Artificial Intelligence

Bachelor of Engineering, East China University of Science and Technology,

Shanghai, China.

Major: Information Engineering

Employment History

2022 - present Postdoc, Australian National University, Canberra, Australia.

(Expect to finish at Jan. 2024)

Supervisor: Prof. Richard Hartley, Dr. Miaomiao Liu.

2013 − 2016 Software Engineer, Dongyuan Computer Automation Engineering Co.,Ltd., Shanghai, China

Publications

Journal Articles

- 1 Mao, W., Liu, M., Salzmann, M., & Li, H. (2021). Multi-level motion attention for human motion prediction. *International Journal of Computer Vision (IJCV)*.
- Yang, J., **Mao**, **W.**, Alvarez, J. M., & Liu, M. (2021). Cost volume pyramid based depth inference for multi-view stereo. *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*.

Conference Proceedings

- Gao, H., **Mao**, **W.**, & Liu, M. (2023). *Visfusion: visibility-aware online 3d scene reconstruction from videos*. Conference on Computer Vision and Pattern Recognition (CVPR).
- Wang, R., Mao, W., & Li, H. (2023a). Deepsimho: stable pose estimation for hand-object interaction via physics simulation. Neural Information Processing Systems (NeurIPS).
- Wang, R., **Mao**, **W.**, & Li, H. (2023b). *Interacting hand-object pose estimation via dense mutual attention*. Winter Conference on Applications of Computer Vision (WACV).
- 4 Mao, W., Liu, M., Hartley, R., & Salzmann, M. (2022). Contact-aware human motion forecasting. Advances in Neural Information Processing Systems (NeurIPS) Spotlight.

- Mao, W., Liu, M., & Salzmann, M. (2022). Weakly-supervised action transition learning for stochastic human motion prediction. Conference on Computer Vision and Pattern Recognition (CVPR) ORAL.
- 6 **Mao**, **W**., Liu, M., & Salzmann, M. (2021). Generating smooth pose sequences for diverse human motion prediction. International Conference on Computer Vision (ICCV) ORAL.
- Mao, W., Liu, M., & Salzmann, M. (2020). History repeats itself: human motion prediction via motion attention. European Conference on Computer Vision (ECCV).
- Yang, J., Mao, W., Alvarez, J. M., & Liu, M. (2020). Cost volume pyramid based depth inference for multi-view stereo. Conference on Computer Vision and Pattern Recognition (CVPR) ORAL.
- 9 **Mao**, **W.**, Liu, M., Salzmann, M., & Li, H. (2019). Learning trajectory dependencies for human motion prediction. International Conference on Computer Vision (ICCV) ORAL.

Teaching

- 2022,2023 Guest Lecturer: Advanced Computer Vision (ENGN8501), ANU.
 - 2021 Tutor: Artificial Intelligence (COMP3620), Computer Vision (ENGN6528), ANU.
 - 2019 Tutor: Computer Vision (ENGN6528), ANU.
 - 2018 Tutor: Artificial Intelligence(COMP3620), Relational Database (COMP6240), ANU.
 - 2017 Tutor: Relational Database (COMP6240), ANU.

Academic Service

Reviewer CVPR: 2021,2022,2023; ICCV: 2021,2023; IJCAI: 2022,2023; ICML: 2022,2023; NeurIPS: 2021,2022; RAL: 2021,2022,2023; ICLR: 2024.

Honour

- 2022 NeurIPS Top Reviewer
 - CVPR Outstanding Reviewer
- 2019 | ICCV Student Travel Award