Wei Mao, XR Vision Lab, Tencent, Canberra

✉ wei.mao.research@gmail.com   ✆ (+61) 416 912 345
🌐 https://wei-mao-2019.github.io/home/
in https://www.linkedin.com/in/wei-mao-anu/
Level 4, Suite 02, 60 Marcus Clarke Street, Canberra, Australia, 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

2009 – 2013   🔖 **Bachelor of Engineering, East China University of Science and Technology, Shanghai, China.**
Major: Information Engineering

Employment History

2024 – now   🔖 **Senior Research Scientist, Tencent, XR Vision Lab, Canberra, Australia.**
Working on: 3D AIGC for games.

2022 – 2024   🔖 **Postdoc, Australian National University, Canberra, Australia.**
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)*.

2. 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

1. **Mao, W.**, Hartley, R., Mathieu, S., & Liu, M. (2024). *Neural sdf flow for 3d reconstruction of dynamic scenes.* The International Conference on Learning Representations (ICLR).

2. Gao, H., **Mao, W.**, & Liu, M. (2023). *Visfusion: visibility-aware online 3d scene reconstruction from videos.* Conference on Computer Vision and Pattern Recognition (CVPR).

3. Wang, R., **Mao, W.**, & Li, H. (2023a). *Deepsimho: stable pose estimation for hand-object interaction via physics simulation.* Neural Information Processing Systems (NeurIPS).

4. Wang, R., **Mao, W.**, & Li, H. (2023b). *Interacting hand-object pose estimation via dense mutual attention.* Winter Conference on Applications of Computer Vision (WACV).

5. **Mao, W.**, Liu, M., Hartley, R., & Salzmann, M. (2022). *Contact-aware human motion forecasting.* Advances in Neural Information Processing Systems (NeurIPS) Spotlight.

6. **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.

7. **Mao, W.,** Liu, M., & Salzmann, M. (2021). *Generating smooth pose sequences for diverse human motion prediction.* International Conference on Computer Vision (ICCV) ORAL.

8. **Mao, W.,** Liu, M., & Salzmann, M. (2020). *History repeats itself: human motion prediction via motion attention.* European Conference on Computer Vision (ECCV).

9. 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.

10. **Mao, W.,** Liu, M., Salzmann, M., & Li, H. (2019). *Learning trajectory dependencies for human motion prediction.* International Conference on Computer Vision (ICCV) ORAL.

Teaching

2023	**Guest Lecturer:** Advanced Computer Vision (ENGN8501), ANU.
2022	**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**