

XIAOXUAN MA

✉ Email: maxiaoxuan@pku.edu.cn

☎ Mobile: (86) 156-5070-3526

🏠 Homepage 📄 Google Scholar 🐙 Github **in** LinkedIn

EDUCATION

- Ph.D. Candidate in Computer Science** 09 / 2021 – 07 / 2025 (expected)
School of Computer Science, Peking University
Advisor: Prof. Yizhou Wang
- M.S. in Computer Science** 09 / 2018 – 07 / 2021
School of Electronics Engineering and Computer Science, Peking University
Advisor: Prof. Yizhou Wang
- B.S. in Computer Science** 09 / 2014 – 07 / 2018
School of Electronics Engineering and Computer Science, Peking University

RESEARCH INTEREST

- Intersection of computer vision and computer graphics, with a special focus on Digital Humans
- Wildlife animal understanding and animal welfare

INTERNSHIP EXPERIENCE

- Research Intern** 01 / 2022 – 08 / 2022
Intelligent Multimedia Group, Microsoft Research Asia
- Monocular 3D human mesh estimation
 - Monocular absolute 3D human pose estimation
- Mentor: Principal Researcher Chunyu Wang

PREPRINTS

- FreeCloth: Free-form Generation Enhances Challenging Clothed Human Modeling. **Under review**, 2024.
Hang Ye[†], Xiaoxuan Ma, Hai Ci, Wentao Zhu, Yizhou Wang
- Efficient Action Counting with Dynamic Queries. **arXiv preprint arXiv:2403.01543**, 2024.
Zishi Li[†], Xiaoxuan Ma, Qiuyan Shang[†], Wentao Zhu, Hai Ci, Yu Qiao, Yizhou Wang
- Real-time Holistic Robot Pose Estimation with Unknown States. **arXiv preprint arXiv:2402.05655**, 2024.
Shikun Ban[†], Juling Fan[†], Wentao Zhu, Xiaoxuan Ma, Yu Qiao, Yizhou Wang

[†] students co-mentored by me.

PUBLICATIONS

- ScoreHypo: Probabilistic Human Mesh Estimation with Hypothesis Scoring. **CVPR**, 2024.
Yuan Xu[†], Xiaoxuan Ma, Jiajun Su, Wentao Zhu, Yu Qiao, Yizhou Wang
- Scaling Up Dynamic Human-Scene Interaction Modeling. **CVPR**, 2024.
Nan Jiang, Zhiyuan Zhang*, Hongjie Li, Xiaoxuan Ma, Zan Wang, Yixin Chen, Tengyu Liu, Yixin Zhu, Siyuan Huang*
- Human Motion Generation: A Survey. **IEEE TPAMI**, 2023.
Wentao Zhu, Xiaoxuan Ma*, Dongwoo Ro*, Hai Ci, Jinlu Zhang, Jiaxin Shi, Feng Gao, Qi Tian, Yizhou Wang*
- ChimpACT: A Longitudinal Dataset for Understanding Chimpanzee Behaviors. **NeurIPS**, 2023.
Xiaoxuan Ma, Stephan P. Kaufhold*, Jiajun Su*, Wentao Zhu, Jack Terwilliger, Andres Meza, Yixin Zhu, Federico Rossano, Yizhou Wang*

- Social Motion Prediction with Cognitive Hierarchies. **NeurIPS**, 2023.
*Wentao Zhu**, *Jason Qin**, *Yuke Lou*, *Hang Ye*, **Xiaoxuan Ma**, *Hai Ci*, *Yizhou Wang*
 - Learning Human Motion Representations: A Unified Perspective. **ICCV**, 2023.
Wentao Zhu, **Xiaoxuan Ma**, *Zhaoyang Liu*, *Libin Liu*, *Wayne Wu*, *Yizhou Wang*
 - 3D Human Mesh Estimation from Virtual Markers. **CVPR**, 2023.
Xiaoxuan Ma, *Jiajun Su*, *Chunyu Wang*, *Wentao Zhu*, *Yizhou Wang*.
 - GFPose: Learning 3D Human Pose Prior with Gradient Fields. **CVPR**, 2023.
Hai Ci, *Mingdong Wu*, *Wentao Zhu*, **Xiaoxuan Ma**, *Hao Dong*, *Fangwei Zhong*, *Yizhou Wang*.
 - Virtual Pose: Learning Generalizable 3D Human Pose Models from Virtual Data. **ECCV**, 2022.
Jiajun Su, *Chunyu Wang*, **Xiaoxuan Ma**, *Wenjun Zeng*, *Yizhou Wang*.
 - Locally Connected Network for Monocular 3D Human Pose Estimation. **IEEE TPAMI**, 2022.
*Hai Ci**, **Xiaoxuan Ma***, *Chunyu Wang*, *Yizhou Wang*.
 - Context Modeling in 3D Human Pose Estimation: A Unified Perspective. **CVPR**, 2021.
Xiaoxuan Ma*, *Jiajun Su**, *Chunyu Wang*, *Hai Ci*, *Yizhou Wang*.
 - Optimizing Network Structure for 3D Human Pose Estimation. **ICCV**, 2019.
Hai Ci, *Chunyu Wang*, **Xiaoxuan Ma**, *Yizhou Wang*.
- * equal contribution. † students co-mentored by me.

SELECTED AWARDS AND HONORS

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| • The Third Prize Scholarship, Peking University | 2023 |
| • Award for Scientific Research, Peking University | 2023 |
| • Award for Scientific Research, Peking University | 2022 |
| • Grand Prize of the 29 th Challenge Cup, Peking University | 2021 |
| • Cushman & Wakefield Scholarship, Peking University | 2020 |
| • Outstanding Student, Peking University | 2020 |
| • Outstanding Undergraduate Thesis, Peking University | 2018 |

PROFESSIONAL SERVICE

Journal Reviewer: IEEE TPAMI, IJCV, IEEE TMM
 Conference Reviewer: CVPR, ICCV, ECCV, NeurIPS, ICLR, AAAI