Ziyan Wang

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EDUCATION

Carnegie Mellon University, Pittsburgh

Aug. 2019 - Current

Ph.D., Robotics Institute

Advisor: Prof. Jessica Hodgins

Carnegie Mellon University, Pittsburgh

M.S. in Computer Vision, Robotics Institute

GPA: 4.11/4.30

Tsinghua University, Beijing

Sept. 2013 - July. 2017

Aug. 2017 - Dec. 2018

B.E. in Automation, Information of Science and Technology

GPA: Overall: 90/100 Major: 92/100 Ranking: 7/145

PUBLICATION

- 1. Yuefan Shen, Shunsuke Saito, Ziyan Wang, Olivier Maury, Chenglei Wu, Jessica Hodgins, Youyi Zheng, and Giljoo Nam. Ct2hair: High-fidelity 3d hair modeling using computed tomography (to appear in Siggraph 2023)
- Ziyan Wang, Giljoo Nam, Tuur Stuyck, Stephen Lombardi, Chen Cao, Jason Saragih, Michael Zollhoefer, Jessica Hodgins, and Christoph Lassner. Neuwigs: A neural dynamic model for volumetric hair capture and animation. arXiv preprint arXiv:2212.00613, 2022 (To appear in CVPR 2023)
- 3. Ziyan Wang, Giljoo Nam, Tuur Stuyck, Stephen Lombardi, Michael Zollhöfer, Jessica Hodgins, and Christoph Lassner. Hvh: Learning a hybrid neural volumetric representation for dynamic hair performance capture. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 6143–6154, June 2022
- 4. Radu Alexandru Rosu, Shunsuke Saito, Ziyan Wang, Chenglei Wu, Sven Behnke, and Giljoo Nam. Neural strands: Learning hair geometry and appearance from multi-view images. *ECCV*, 2022
- 5. Ziyan Wang, Timur Bagautdinov, Stephen Lombardi, Tomas Simon, Jason Saragih, Jessica Hodgins, and Michael Zollhofer. Learning compositional radiance fields of dynamic human heads. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 5704–5713, June 2021 (Oral top 4.19%)
- 6. Ziyan Wang, Buyu Liu, Samuel Schulter, and Manmohan Chandraker. A parametric top-view representation of complex road scenes. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2019
- 7. Ziyan Wang*, Ricson Cheng*, and Katerina Fragkiadaki. Active geometry-aware visual recognition in cluttered scenes. Advances in Neural Information Processing Systems 31, 2018
- 8. Rui Zhu, Chaoyang Wang, Chen-Hsuan Lin, Ziyan Wang, and Simon Lucey. Object-centric photometric bundle adjustment with deep shape prior. In 2018 IEEE Winter Conference on Applications of Computer Vision (WACV), pages 894–902. IEEE, 2018
- 9. Rui Zhu, Chaoyang Wang, Chen-Hsuan Lin, Ziyan Wang, and Simon Lucey. Semantic photometric bundle adjustment on natural sequences. *CoRR*, abs/1712.00110, 2017
- 10. Xinlei Pan, Yurong You, Ziyan Wang, and Cewu Lu. Virtual to real reinforcement learning for autonomous driving. In *British Machine Vision Conference 2017*, *BMVC 2017*, *London*, *UK*, *September 4-7*, 2017, 2017 (Spotlight)
- 11. Ziyan Wang, Jiwen Lu, Ruogu Lin, Jianjiang Feng, et al. Correlated and individual multi-modal deep learning for rgb-d object recognition. arXiv preprint arXiv:1604.01655, 2016

WORK EXPERIENCE

Meta Reality Lab, Pittsburgh
Visiting Researcher

Apr. 2021 - Apr. 2023
Manager: Stephen Lombardi, Christoph Lassner

Meta Reality Lab, Pittsburgh

Research Intern

May. 2020 - Dec. 2020

Advisor: Michael Zollhoefer

Amazon Web Service(AWS)

Applied Scientist Intern, Rekognition and Video

Apr. 2019 - Aug. 2019

Collaborator: Yifan Xing

Dr. Wei Xia

NEC Laboratories American, Cupertino

May. 2018 - Aug. 2018

Research Assistant, Media Analytics Group

Advisor: Dr. Samuel Schulter

AWARDS AND ACTIVITIES

2016 Tsinghua Spark Scientific and Technological Innovation Program (50/3300)

2016/2015 Scholarship for Excellent Academic Performances(10/300)

2014 Broad chairman of Tsinghua Spark Club

2014 Second Prize in 31th China Regional College Students Physics competition(80/10000)

COMPUTER SKILLS

Basic Knowledge: Python, PyTorch, TensorFlow, C/C++, Matlab, Linux, Lander, Blender