ZIYUN (CLAUDE) WANG

GRASP Laboratory, University of Pennsylvania
Email: ziyunw@seas.upenn.edu
Personal website: ziyunclaudewang.github.io

EDUCATION

GRASP Lab, University of Pennsylvania, Philadelphia, PA *2020 - 2025 (Expected)*
Ph.D. Student, Computer Science
Advisor: Kostas Daniilidis

GRASP Lab, University of Pennsylvania, Philadelphia, PA *2017 - 2019*
M.S.E, Robotics
Advisor: Kostas Daniilidis

Rice University, Houston, TX *2013 - 2017*
B.S., Computer Science

PUBLICATIONS

1. **Ziyun Wang**, Friedhelm Hamann, Kenneth Chaney, Wan Jiang, Guillermo Gallego, Kostas Daniilidis. "Event-based Continuous Color Video Decompression from Single Frames." Preprint. **2023**
2. **Ziyun Wang**, Jinyuan Guo, Kostas Daniilidis. "Un-EvMoSeg: Unsupervised Event-based Independent Motion Segmentation." Preprint. **2023**
3. Kenneth Channey*, Fernando Cladera*, **Ziyun Wang**, Anthony Bisulco, M Ani Hsieh, Christopher Korpela, Vijay Kumar, Camillo J Taylor, Kostas Daniilidis. "M3ED: Multi-Robot, Multi-Sensor, Multi-Environment Event Dataset." *Event-based Vision Workshop, CVPR* **2023**
4. **Ziyun Wang***, Kenneth Chaney*, Kostas Daniilidis. "EvAC3D: From Event-Based Apparent Contours to 3D Models via Continuous Visual Hulls." *European Conference on Computer Vision (ECCV)* (**Oral Presentation, 2.7% of submissions**) **2022**
5. **Ziyun Wang***, Fernando Cladera*, Anthony Bisulco, Daewon Lee, Camillo J Taylor, Kostas Daniilidis, M Ani Hsieh, Daniel D Lee, Volkan Isler. "EV-Catcher: High-Speed Object Catching Using Low-Latency Event-Based Neural Networks." *IEEE Robotics and Automation Letters (RA-L)* **2022**
6. Alex Zhu, **Ziyun Wang**, Kaung Khant, Kostas Daniilidis. "Eventgan: Leveraging large scale image datasets for event cameras." *IEEE International Conference on Computational Photography (ICCP)* **2021**
7. Jinwook Huh, Galen Xing, **Ziyun Wang**, Volkan Isler, Daniel D. Lee. "Learning to generate cost-to-go functions for efficient motion planning." *Experimental Robotics: The 17th International Symposium* **2021**
8. **Ziyun Wang**, Eric Mitchell, Volkan Isler, Daniel D. Lee. "Geodesic-HOF: 3D Reconstruction Without Cutting Corners." *AAAI Conference on Artificial Intelligence* **2021**
9. **Ziyun Wang**, Volkan Isler, Daniel D. Lee. "Surface HOF: Surface Reconstruction from a Single Image Using Higher Order Function Networks." *IEEE International Conference on Image Processing (ICIP)* **2020**
10. Alex Zhu, **Ziyun Wang**, Kostas Daniilidis. "Motion Equivariant Networks for Event Cameras with the Temporal Normalization Transform." Preprint. **2019**

11. Alex Zhu, Wenxin Liu, **Ziyun Wang**, Vijay Kumar, Kostas Daniilidis. "Robustness Meets Deep Learning: An End-to-End Hybrid Pipeline for Unsupervised Learning of Egomotion." *Workshop on Deep Learning for Semantic Visual Navigation, CVPR 2019* **2019**

PROFESSIONAL EXPERIENCE

Samsung AI Center New York 2019-2020
Research Intern, Advisors: Volkan Isler, Daniel D. Lee, Sebastian Seung

- Developed algorithms for single view 3D surface reconstruction using hyper networks using geometric priors, including surface normal and geodesic distance.
- Collaborated on a project where a cost-to-go function was learned for efficient motion planning.

Vrbo, Expedia Group 2016, 2017
Software Development Intern

- Developed a sentiment analysis tool for the Quantitative Assurance Team.
- Deployed tools to generating user satisfaction report for sub-brands.
- Built customizable dependency monitors for the internal cloud applications.

TEACHING ASSISTANT

MEAM 620 Advanced Robotics (Spring 2018, Spring 2022)
CIS 580 Machine Perception (Spring 2022)

REVIEWING

Conference on Computer Vision and Pattern Recognition (CVPR)	2023
International Conference on Computer Vision (ICCV)	2023
IEEE Robotics and Automation Letters (RA-L)	2022, 2023
International Conference on Robotics and Automation (ICRA)	2021, 2022, 2023
International Conference on Intelligent Robots and Systems (IROS)	2022

TECHNICAL STRENGTHS

Computer Languages	Python, C++, Matlab, C, Java, Javascript
Software & Tools	Pytorch, ROS, Tensorflow