Youmin Zhang

Jiangxi Province, China

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"Everything happens the best."

Education

University of Bologna
Bologna, Italy
PH.D. IN COMPUTER SCIENCE AND TECHNOLOGY
Nov. 2020 - Feb. 2024
- Topics including: depth sensing, SLAM, stereo matching, depth from a single image
- Supervisor: Prof.Stefano Mattoccia and Prof.Matteo Poggi

ETH Zurich
Zurich, Switzerland
VISITING PH.D. IN COMPUTER VISION AND GEOMETRY GROUP
May. 2023 - Nov. 2023
- Topics including: NeRF-based SLAM, NeRF-based Multiview Stereo Matching
- Advisor: Prof.Marc Pollefeys and Dr.Songyou Peng

Beihang University
Beijing, China
M.S. IN COMPUTER SCIENCE AND TECHNOLOGY
Sep. 2017 - Jun. 2020
- Thesis: Research and Implementations of Real-time and High Accuracy Binocular Stereo Matching Algorithms
- Supervisor: Prof.Xiao Bai

Dalian Maritime University
Dalian, China
B.S. IN COMMUNICATION ENGINEERING
Sep. 2013 - Jul. 2017
- GPA: 4.05/5.0
- Ranking: 4/128

Selected Publications

1. **Youmin Zhang**, Matteo Poggi, Fabio Tosi, Stefano, Mattoccia. *GO-SLAM: Global Optimization for Consistent 3D Instant Reconstruction*. **ICCV.** 2023.
2. **Youmin Zhang**, Matteo Poggi, Zheng Zhu, Guan Huang, Stefano Mattoccia. *CompletionFormer: Depth Completion with Convolutions and Vision Transformers*. **CVPR,** 2023.
3. **Youmin Zhang**, Matteo Poggi, Stefano Mattoccia. *TemporalStereo: Efficient Spatial-Temporal Stereo Matching Network*. **IROS,** 2023.
4. **Youmin Zhang***, Chaoqiang Zhao*, Matteo Poggi, Fabio Tosi, Xianda Guo,Zheng Zhu, Guan Huang, Yang Tang, Stefano Mattoccia. *MonoViT: Self-Supervised Monocular Depth Estimation with a Vision Transformer*. **3DV,** 2022.
5. **Youmin Zhang***, Yimin Chen*, Xiao Bai, Suihanjin Yu, Kun Yu, Zhiwei Li, and Kuiyuan Yang. *Adaptive Unimodal Cost Volume Filtering for Deep Stereo Matching*. **AAAI,** 2020.
6. Xiaoli Huang, Tongge Xu, Lvan Jiao, Yueran Zu, **Youmin Zhang**. *Adaptive Beam Search Decoding for Discrete Keyphrase Generation*. **AAAI,** 2021.
7. Suihanjin Yu, **Youmin Zhang**, Chen Wang, Xiao Bai, Liang Zhang, Edwin R Hancock. *HMFlow: Hybrid Matching Optical Flow Network for Small and Fast-Moving Objects*. **ICPR,** 2021.

Work Experience

Jiangxi Research Institute of Beihang University
Jiangxi, China
RESEARCHER SCIENTIST
Sept. 2020 - April. 2021
- Development and validation of Visual SLAM for robot (TurtleBot2) navigation and scene reconstruction.

Y-tech, Kuaishou Technology
Beijing, China
RESEARCH INTERNSHIP
Mar. 2020 - Sept. 2020
- Monocular Depth Estimation for Hybrid Augmented Reality.

Deep Motion   *Beijing, China*
RESEARCH INTERNSHIP, MENTOR: KUIYUAN YANG   *Nov. 2018 - Dec. 2019*
- Studying stereo matching related problems for Automatic Driving.
- Adaptive Unimodal Cost Volume Filtering for Deep Stereo Matching. Accepted to AAAI 2020.

Honors & Awards

INTERNATIONAL

2016	**Silver Medal**, The ACM-ICPC Asia Regional Programming Contest	*Changchun, China*

DOMESTIC

2018-2019	**National Scholarship**, For postgraduates	*China*
2013-2017	**National Motivational Scholarship**, For 4 consecutive years	*China*
2015	**First Prize**, The 2015 ACM-ICPC China Northeast Invitational Programming Contests	*China*
2015	**First Prize**, The 2015 Liaoning Province ACM-ICPC Contest	*China*