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Education

Technical University of Munich (*Technische Universität München*)

Ph.D. in Computer Science

Beijing University of Posts and Telecommunications

M.Sc. Eng. in Electronics and Communication Engineering

Beijing University of Posts and Telecommunications

B.Sc. in Communication Engineering

Publications

- [1] **HiNeuS: High-fidelity Neural Surface Mitigating Low-texture and Reflective Ambiguity**
YIDA WANG, XUEYANG ZHANG, KUN ZHAN, PENG JIA, XIANPENG LANG, INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV)²⁰²⁵ [HIGHLIGHT]
- [2] **Hierarchy UGP: Hierarchy Unified Gaussian Primitive for Large-Scale Dynamic Scene Reconstruction**
HONGYANG SUN, QINGLIN YANG, JIAWEI WANG, ZHEN XU, CHEN LIU, YIDA WANG, KUN ZHAN, HUJUN BAO, XIAOWEI ZHOU, SIDA PENG, INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV)²⁰²⁵
- [3] **3DRealCar: An In-the-wild RGB-D Car Dataset with 360-degree Views**
XIAOBAO DU, YIDA WANG, HAIYANG SUN, ZHUOJIE WU, HONGWEI SHENG, SHUYUN WANG, JIAYING YING, MING LU, TIANQING ZHU, KUN ZHAN, ... INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV)²⁰²⁵
- [4] **GeoDrive: 3D Geometry-Informed Driving World Model with Precise Action Control**
ANTHONY CHEN, WENZHAO ZHENG, YIDA WANG, XUEYANG ZHANG, KUN ZHAN, PENG JIA, KURT KEUTZER, SHANGHANG ZHANG, UNDER REVIEW
- [5] **StreetCrafter: Street View Synthesis with Controllable Video Diffusion Models**
YUNZHI YAN, ZHEN XU, HAOTONG LIN, HAIAN JIN, HAOYU GUO, YIDA WANG, KUN ZHAN, XIANPENG LANG, HUJUN BAO, XIAOWEI ZHOU, SIDA PENG, CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR)²⁰²⁵
- [6] **Drivedreamer4d: World Models are Effective Data Machines for 4d Driving Scene Representation**
GUOSHENG ZHAO, CHAOJUN NI, XIAOFENG WANG, ZHENG ZHU, XUEYANG ZHANG, YIDA WANG, GUAN HUANG, XINZE CHEN, BOYUAN WANG, YOUYI ZHANG, WENJUN MEI, XINGANG WANG, CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR)²⁰²⁵
- [7] **ReconDreamer: Crafting World Models for Driving Scene Reconstruction via Online Restoration**
CHAOJUN NI, GUOSHENG ZHAO, XIAOFENG WANG, ZHENG ZHU, WENKANG QIN, GUAN HUANG, CHEN LIU, YUYIN CHEN, YIDA WANG, XUEYANG ZHANG, YIFEI ZHAN, KUN ZHAN, PENG JIA, XIANPENG LANG, XINGANG WANG, WENJUN MEI, CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR)²⁰²⁵
- [8] **RaNeuS: Ray-adaptive Neural Surface Reconstruction**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, IEEE CONFERENCE ON 3D VISION (3DV)²⁰²⁴ [ORAL]
- [9] **SecNet: Semantic Eye Completion in Implicit Field**
YIDA WANG, YIRU SHEN, DAVID JOSEPH TAN, FEDERICO TOMBARI, SACHIN TALATHI, NEURIPS GAZE MEETS ML (PMLR)²⁰²²
- [10] **Lidar Upsampling with Sliced Wasserstein Distance**
ARTEM SAVKIN, YIDA WANG, SEBASTIAN WIRKERT, NASSIR NAVAB, FEDERICO TOMBARI, IEEE ROBOTICS AND AUTOMATION LETTERS (RAL)²⁰²²
- [11] **Self-supervised Latent Space Optimization with Nebula Variational Coding**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE (T-PAMI)²⁰²²

- [12] **Learning Local Displacements for Point Cloud Completion**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR)²⁰²²
- [13] **SoftPool++: An Encoder-Decoder Network for Point Cloud Completion**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, INTERNATIONAL JOURNAL OF COMPUTER VISION (IJCV)²⁰²²
- [14] **SoftPoolNet: Shape Descriptor for Point Cloud Completion and Classification**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV)²⁰²⁰ [ORAL] [DEMO](#)
- [15] **Structure-SLAM: Low-Drift Monocular SLAM in Indoor Environments**
YANYAN LI, NIKOLAS BRASCH, YIDA WANG, NASSIR NAVAB, FEDERICO TOMBARI, INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS)²⁰²⁰
- [16] **ForkNet: Multi-branch Volumetric Semantic Completion from a Single Depth Image**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV)²⁰¹⁹
- [17] **Variational Object-aware 3D Hand Pose from a Single RGB Image**
YIDA WANG*, YAFEI GAO*, PIETRO FALCO, NASSIR NAVAB, FEDERICO TOMBARI, THE IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION (ICRA)²⁰¹⁹ [DEMO](#)
- [18] **Adversarial Semantic Scene Completion from a Single Depth Image**
YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB AND FEDERICO TOMBARI, IEEE CONFERENCE ON 3D VISION (3DV)²⁰¹⁸ [DEMO](#)
- [19] **Generative Model with Coordinate Metric Learning for Object Recognition Based on 3D Models**
YIDA WANG AND WEIHONG DENG, IEEE TRANSACTIONS ON IMAGE PROCESSING (TIP)²⁰¹⁸
- [20] **ZigzagNet: Efficient Deep Learning for Real Object Recognition Based on 3D Models**
YIDA WANG, CAN CUI AND WEIHONG DENG, ASIA CONFERENCE ON COMPUTER VISION (ACCV)²⁰¹⁶
- [21] **Self-restraint Object Recognition by Model Based CNN Learning**
YIDA WANG AND WEIHONG DENG, INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (ICIP)²⁰¹⁶
- [22] **Large-Scale 3D Shape Retrieval from ShapeNet Core55**
CO-AUTHORED, EUROGRAPHICS (EG)²⁰¹⁶

Experience

Li Auto Inc.

SENIOR RESEARCH AND DEVELOPMENT ENGINEER (*team supervisor*)

Shanghai
Jan. 2024 - now

- Deliver 3D vehicle assets (3DRealCar dataset); Optimizing Li Auto MVS simulator
- Deploy multi-agent dynamics in closed-loop simulation + reinforcement learning
- Feedforward dynamic street simulation

Riemann Labs

STAFF RESEARCH ENGINEER

Shenzhen
Jan. 2023 - Dec. 2023

- Urban region reconstruction with drones

Synthesisia

RESEARCH INTERN

London, UK
Jun. 2022 - Oct. 2022

- High-fidelity Neural Actor

Facebook

RESEARCH INTERN

Seattle, USA
Jun. 2021 - Oct. 2021

- Semantic 3D reconstruction for eye tracking

Google

SOFTWARE ENGINEER

Remote
Apr. 2015 - Sep. 2016

- Developing [tiny-dnn](#), e.g. a deep learning backend; 3 submodules: [3D metric learning](#), [quantized deep learning](#) and [super resolution](#).

Awards

Fellows	2017-2021, MLH, TUM and Bleence	Munich, Germany
Contest	2016, Microsoft Open Source Challenge , 2 nd Prize	Redmond, U.S.A
	2013, SCILAB Scientific Simulation Contest, 1 st Prize	Hefei
	2009, Senior High Math Contest, National 3 rd Prize	Dalian
Awards	2019, Outstanding Non-CSC PhD Students Abroad Scholarship	Munich, Germany
	2016, National Scholarship	Beijing
	2017, Outstanding Master Graduate of Beijing	Beijing
	2014, Outstanding Bachelor Graduate of Beijing	Beijing
Tracks	2015, Beijing International Triathlon, Bronze Medal in Division 20-24	Beijing
	2016, Capital College Track and Field 4×400m, Gold Medal in Division B	Beijing
	2014, Capital College Track and Field 3000m steeplechase, Bronze Medal in Division B	Beijing