

# la WANG

Shanghai, China

□ (+86) 137-1797-8744 | 🗷 wangyida1@lixiang.com | 🐔 wangyida.github.io | 🖫 wangyida | 🛅

yida-wang-910123 | S wangyida123@outlook.com

**Education** 

#### Technical University of Munich (Technische Universität München)

Рн.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**

- 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

#### StreetCrafter: Street View Synthesis with Controllable Video Diffusion Models

[2] 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)  $^{2025}$ 

#### 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)  $^{2025}$ 

#### ReconDreamer: Crafting World Models for Driving Scene Reconstruction via Online Restoration

- [4] CHAOJUN NI, GUOSHENG ZHAO, XIAOFENG WANG, ZHENG ZHU, WENKANG QIN, GUAN HUANG, CHEN LIU, YUYIN CHEN, YIDA WANG, XUEYANG ZHANG, YIFEI ZHAN, KUN ZHAN,  $Peng Jia, Xianpeng Lang, Xingang Wang, Wenjun Mei, Conference on Computer Vision and Pattern Recognition (CVPR) \\ ^{2025}$
- **Efficient Multi-View Driving Scenes Generation Based on Video Diffusion Transformer** [5] JUNPENG JIANG, GANGYI HONG, HENGTONG HU, LIJUN ZHOU, TIANYI YAN, YIDA WANG, KUN ZHAN, PENG JIA, XIANPENG LANG, MIAO ZHANG, ICLR W<sup>2025</sup>
- High-fidelity Endoscopic Image Synthesis by Utilizing Depth-guided Neural Surfaces [6] Baoru Huang, **Yida Wang**, Anh Nguyen, Daniel Elson, Francisco Vasconcelos, Danail Stoyanov, (CVPR W) $^{2024}$
- **RaNeuS: Ray-adaptive Neural Surface Reconstruction** 
  - YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, IEEE CONFERENCE ON 3D VISION (3DV) $^{2024}$  [Oral]
- **SecNet: Semantic Eye Completion in Implicit Field** [8]
  - YIDA WANG, YIRU SHEN, DAVID JOSEPH TAN, FEDERICO TOMBARI, SACHIN TALATHI, NEURIPS GAZE MEETS ML (PMLR) $^{2022}$
- **Lidar Upsampling with Sliced Wasserstein Distance** [9]
  - ARTEM SAVKIN, YIDA WANG, SEBASTIAN WIRKERT, NASSIR NAVAB, FEDERICO TOMBARI, IEEE ROBOTICS AND AUTOMATION LETTERS (RAL) 2022
- Self-supervised Latent Space Optimization with Nebula Variational Coding [10]
  - YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE (T-PAMI) 2022
- **Learning Local Displacements for Point Cloud Completion** [11]
  - YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR) 2022
- SoftPool++: An Encoder-Decoder Network for Point Cloud Completion

YIDA WANG, DAVID JOSEPH TAN, NASSIR NAVAB, FEDERICO TOMBARI, INTERNATIONAL JOURNAL OF COMPUTER VISION (IJCV) $^{2022}$ 

### [13] SoftPoolNet: Shape Descriptor for Point Cloud Completion and Classification

 $\textbf{YIDA WANG}, \textbf{DAVID JOSEPH TAN}, \textbf{NASSIR NAVAB}, \textbf{FEDERICO TOMBARI}, \textbf{EUROPEAN CONFERENCE ON COMPUTER VISION (ECCV)} \\ \underline{\textbf{2020}} \ [\textbf{ORAL}] \ \underline{\textbf{DEMO}}$ 

### $\lceil 14 \rceil$ 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

## $_{[15]}$ ForkNet: Multi-branch Volumetric Semantic Completion from a Single Depth Image

 $\textbf{YIDA WANG}, \textbf{DAVID JOSEPH TAN}, \textbf{NASSIR NAVAB}, \textbf{FEDERICO TOMBARI}, \textbf{INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV)} \\ 2019 \\ \textbf{100} \\$ 

# $\lceil 16 \rceil$ 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

### $\lceil 17 \rceil$ 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) $^{2018}$  <u>DEMO</u>

### Generative Model with Coordinate Metric Learning for Object Recognition Based on 3D Models $\lceil 18 \rceil$

**YIDA WANG** AND WEIHONG DENG, IEEE TRANSACTIONS ON IMAGE PROCESSING  $(TIP)^{2018}$ 

### [19] ZigzagNet: Efficient Deep Learning for Real Object Recognition Based on 3D Models

 $\textbf{YIDA WANG}, \texttt{CAN CUI AND WEIHONG DENG}, \texttt{ASIA CONFERENCE ON COMPUTER VISION (ACCV)} \\ ^{2016}$ 

### [20] Self-restraint Object Recognition by Model Based CNN Learning

YIDA WANG AND WEIHONG DENG, INTERNATIONAL CONFERENCE ON IMAGE PROCESSING (ICIP)  $^{2016}$ 

## $\lceil 21 \rceil$ Large-Scale 3D Shape Retrieval from ShapeNet Core55

co-authored, Eurographics (EG)  $^{2016}$ 

### Experience \_\_\_\_\_

Li Auto Inc. Shanaha

SENIOR RESEARCH AND DEVELOPMENT ENGINEER

Jan. 2024 - now

- Dynamic 3D simulation, diffusion synthesis, and multi-agent dynamics

Synthesia London, UK

RESEARCH INTERN

Jun. 2022 - Oct. 2022

• High-fidelity Neural Actor

Facebook Reality Lab Seattle, USA

RESEARCH INTERN

Jun. 2021 - Oct. 2021

• Semantic 3D reconstruction for eye tracking

OpenCV & Google Remote

SOFTWARE ENGINEER 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 <sub>nd</sub> Prize	Redmond, U.S.A
	2013, SCILAB Scientific Open-source Contest, 1 <sub>st</sub> Prize	Hefei
	2009, Senior High Math Contest, National 3 <sub>rd</sub> Prize	Dalian
Awards	2019, Award for Outstanding Self-Financed Students Abroad	Munich, Germany
	2016, National Scholarship	Beijing
	2017, Outstanding Master Graduate of Beijing City	Beijing
	2014, Outstanding Bachelor Graduate of Beijing City	Beijing
Tracks	2015, Beijing International Triathlon, Bronze Medal	Beijing
	2016, Capital College Track and Field 4×400m, Gold Medal	Beijing
	2014, Capital College Track and Field 3000m steeplechase. Bronze Medal	Beiiina