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Major: Computer Science / Statistics / Electronic and Computer Engineering

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EDUCATION

•Swiss Federal Technology Institute of Lausanne (EPFL)

PhD in Computer Science

From 2024.09

Instructor: [Prof. Haitham Al Hassanieh](#)

•Fudan University

Master student of Statistics

2021.09-2024.09

Instructor: [Dr. Li Zhang](#)

•Shanghai Jiao Tong University

B.Eng. in Electronic and Computer Engineering

2017.09 - 2021.08

GPA: 3.67, Ranking: 11/148

PUBLICATIONS

- [1] **Jiachen Lu**, Hailan Shanbhag, Haitham Al Hassanieh. "GeRaF: Neural Geometry Reconstruction from Radio Frequency Signals." In *NeurIPS* (**Spotlight**), 2025.
- [2] **Jiachen Lu**, ..., Li Zhang. "Translating Images to Road Network: A Sequence-to-Sequence Perspective." *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)* (Sep 2025).
- [3] Yurui Chen, Junge Zhang, Ziyang Xie, Wenye Li, Feihu Zhang, **Jiachen Lu**, Li Zhang. "S-nerf++: Autonomous driving simulation via neural reconstruction and generation." *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)* (June 2025).
- [4] Qiang Wan, Zilong Huang, **Jiachen Lu**, Gang Yu, Li Zhang. "SeaFormer++: Squeeze-enhanced axial transformer for mobile visual recognition." *International Journal of Computer Vision (IJCV)* (June 2025).
- [5] **Jiachen Lu**, Li Zhang, ..., Philip H. S. Torr. "Vision Transformers: From Semantic Segmentation to Dense Prediction." *International Journal of Computer Vision (IJCV)* (July 2024).
- [6] **Jiachen Lu**, Ze Huang, Zeyu Yang, Jiahui Zhang, Li Zhang. "WoVoGen: World Volume-aware Diffusion for Controllable Multi-camera Driving Scene Generation." In *ECCV*, 2024.
- [7] **Jiachen Lu**, Junge Zhang, Xiatian Zhu, Jianfeng Feng, Tao Xiang, Li Zhang. "Softmax-free Linear Transformers." *International Journal of Computer Vision (IJCV)* (March 2024).
- [8] Jiaqi Chen, Yuxian Jiang, **Jiachen Lu**, Li Zhang. "S-Agent: self-organizing agents in open-ended environment." *ICLR Workshop*. 2024.
- [9] Zijie Pan, **Jiachen Lu**, Xiatian Zhu, Li Zhang. "Enhancing High-Resolution 3D Generation through Pixel-wise Gradient Clipping." In *ICLR*. 2024..
- [10] **Jiachen Lu**, Renyuan Peng, ..., Li Zhang. "Translating Images to Road Network: A Non-Autoregressive Sequence-to-Sequence Approach." In *ICCV* (**Oral**). 2023..
- [11] Zheyuan Zhou, **Jiachen Lu**, Yihan Zeng, Hang Xu, Li Zhang. "SUIT: Learning Significance-guided Information for 3D Temporal Detection." In *IROS*, 2023..
- [12] Jiaqi Chen, **Jiachen Lu**, Xiatian Zhu, Li Zhang. "Generative Semantic Segmentation." In *CVPR*, 2023..
- [13] Qiang Wan, Zilong Huang, **Jiachen Lu**, Gang Yu, Li Zhang. "SeaFormer: Squeeze-enhanced Axial Transformer for Mobile Semantic Segmentation." In *ICLR*, 2023..
- [14] **Jiachen Lu**, Zheyuan Zhou, Xiatian Zhu, Hang Xu, Li Zhang. "Learning Ego 3D Representation as Ray Tracing." In *ECCV*, 2022..
- [15] **Jiachen Lu**, Jinghan Yao, Junge Zhang, Xiatian Zhu, Hang Xu, Weiguo Gao, Chunjing Xu, Tao Xiang, Li Zhang. "Soft: Softmax-free transformer with linear complexity." In *NeurIPS* (**Spotlight**), 2021..
- [16] Sixiao Zheng, **Jiachen Lu**, ..., Philip HS Torr, Li Zhang. "Rethinking semantic segmentation from a sequence-to-sequence perspective with transformers." In *CVPR*, 2021.

HONORS AND AWARDS

- | | | |
|---|--------------------------------------|------|
| •National Scholarship for 2018-2019 academic year | by Ministry of Education of China | 2019 |
| •National Scholarship for 2021-2022 academic year | by Ministry of Education of China | 2022 |
| •National Scholarship for 2022-2023 academic year | by Ministry of Education of China | 2023 |
| •Shanghai Outstanding Graduate | by Ministry of Education of Shanghai | 2021 |
| •Shanghai Outstanding Graduate | by Ministry of Education of Shanghai | 2024 |

ACADEMIC SERVICES

- | | | |
|--|---|----------------------|
| •Organizer/Chair | CVPR 2023 workshop on End-to-End Autonomous Driving | CVPR 2023, Vancouver |
| – Workshop Page: https://e2ead.github.io/ | | |