

# Jiachen Lu

Major: Computer Science / Statistics / Electronic and Computer Engineering

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PhD Student, Computer and Communication Sciences, EPFL, Switzerland

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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/>