



# RUNJIAN CHEN

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 Homepage

 Google Scholar

## EDUCATION

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### Zhejiang University

Sept. 2016 – Jul. 2020

*B.Eng. in Automation (Robotics Track) at College of Control Science and Engineering*

- GPA: 3.94/4.00 (90.44/100); Major GPA: 3.95/4.00 (91.23/100); Ranking: **2/141 (Top 2%)**
- Honors Program: Mixed Class in Chu Kochen Honor College (**Top 5%** students at ZJU)
- Honors Minor Program: The Advanced Honor Class of Engineering Education Program

### The University of Hong Kong

Sept. 2021 – Jul. 2025 (expected)

*Doctor of Philosophy in Computer Science*

*Supervised by Prof. Ping Luo*

### Yale University

Mar. 2024 – Oct. 2024

*Visiting PhD Student with Prof. Alex Wong*

## HONORS AND AWARDS

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### Scholarship

- |   |             |
|---|-------------|
| • Y S and Christabel Lung Postgraduate Scholarship                                    | 2021        |
| • Hong Kong PhD Fellowship  | 2021-2025   |
| • HKU Presidential PhD Scholarship  | 2021-2025   |
| • SUPCON Scholarship for Academic Excellence in Automation ( <b>Top 1%</b> )          | 2019        |
| • Second-class Scholarship for Academic Excellence (Top 8%)                           | 2019        |
| • Hailiang Scholarship for Academic Excellence in Mixed Honor Class ( <b>Top 2%</b> ) | 2018        |
| • First-class Scholarship for Academic Excellence ( <b>Top 3%</b> )                   | 2017 & 2018 |

### Academic Competitions Awards

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|---|------|
| • Meritorious Winner in Mathematical Contest in Modeling (Top 7% in 25,370 teams) | 2019 |
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Shanghai Artificial Intelligence Lab

Sept. 2022 – Mar. 2024

Cruise

Jun. 2024 – Sept. 2024

## SELECTED PUBLICATIONS

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1. **R. Chen**, Y. Mu, R. Xu, W. Shao, C. Jiang, Y. Qiao, Z. Li and P. Luo. *CO3: Cooperative Unsupervised 3D Representation Learning for Autonomous Driving*. International Conference on Learning Representation, 2023.
2. **R. Chen**, H. Yin, Y. Jiao, G. Dissanayake, Y. Wang and R. Xiong. *A Samplable Multimodal Observation Model for Global Localization and Kidnapping*. The IEEE Robotics and Automation Letters & The International Conference on Robotics and Automation (ICRA), 2021.
3. **R. Chen**, W. Shao, B. Zhang, S. Shi, L. Jiang, Y. Qiao, P. Luo. *JiSAM : Alleviate Labeling Burden and Corner Case Problems in Autonomous Driving via Minimal Real-World Data*. (**in submission**)
4. **R. Chen**, H. Park, B. Zhang, W. Shao, P. Luo, A. Wong. *TREND: Unsupervised 3D Representation Learning via Temporal Forecasting for LiDAR Perception*. (**in submission**)
5. **R. Chen**, H. Zhang, A. Ravichandran, W. Shao, A. Wong, P. Luo. *CLAP: Unsupervised 3D Representation Learning for Fusion 3D Perception via Curvature Sampling and Prototype Learning*. (**in submission**)
6. H. Yin, **R. Chen**, Y. Wang, R. Xiong. *RaLL: End-to-end Radar Localization on Lidar Map Using Differentiable Measurement Model*. IEEE Transactions on Intelligent Transportation Systems (IF=6.3).
7. K. Xu, **R. Chen**, S. Zhao, Z. Li, H. Yu, C. Chen, Y. Wang, R. Xiong. *Failure-aware policy learning for self-assessable robotics tasks*. International Conference on Robotics and Automation 2023.
8. X. Yan\*, **R. Chen\***, B. Zhang, J. Yuan, X. Cai, B. Shi, W. Shao, J. Yan, P. Luo, Y. Qiao. *SPOT: Scalable 3D Pre-training via Occupancy Prediction for Autonomous Driving*. (**in submission**)
9. Z. Wang, J. Zhang, **R. Chen**, W. Wang, P. Luo. *Restoreformer: High-quality blind face restoration from undegraded key-value pairs*. Proceedings of the IEEE/CVF conference on computer vision and pattern recognition, 2022.
10. B. Hu, L. Chen, **R. Chen**, S. Bu, P. Han, H. Li. *CurriculumLoc: Enhancing Cross-Domain Geolocalization through Multi-Stage Refinement*. IEEE Transactions on Geoscience and Remote Sensing.
11. R. Xu, T. Wang, W. Zhang, **R. Chen**, J. Cao, J. Pang, D. Lin. *Mv-jar: Masked voxel jigsaw and reconstruction for lidar-based self-supervised pre-training* Proceedings of the IEEE/CVF conference on computer vision and pattern recognition, 2023.
12. S. Chen, E. Xie, C. Ge, **R. Chen**, L. Ding and P. Luo. *CycleMLP: A MLP-like Architecture for Dense Prediction*. International Conference on Learning Representations, 2021 (Extended version on T-PAMI).
13. Y. Mu, S. Chen, M. Ding, J. Chen, **R. Chen** and P. Luo. *CtrlFormer: Learning Transferable State Representation for Visual Control via Transformer*. International Conference on Machine Learning, 2022.

14. Y. Yang, Y. Lin, H. Liu, W. Shao, **R. Chen**, H. Shang, Y. Wang, Y. Qiao, K. Zhang, P. Luo. *Towards Implicit Prompt For Text-To-Image Models*. International Conference on Machine Learning, 2024.
15. Y. Mu, J. Chen, Q. Zhang, S. Chen, Q. Yu, C. Ge, **R. Chen**, Z. Liang, M. Hu, C. Tao, P. Sun, H. Yu, C. Tao, P. Sun, H. Yu, C. Yang, W. Shao, W. Wang, J. Dai, Y. Qiao, M. Ding, P. Luo. *RoboCodeX: Multimodal Code Generation for Robotic Behavior Synthesis*. International Conference on Machine Learning, 2024.