

# Kefei Zhu

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## Education

<b>Beijing University of Posts and Telecommunications</b> M.Sc. in Management Science and Engineering	<i>Sep 2021 - Jun 2024</i>
<b>China Jiliang University</b> B.Eng. in Industrial Engineering	<i>Sep 2017 - Jun 2021</i>



## Research Experience

<b>Research Visitor, Peking University</b> Advised by Prof. Hao Dong with Robotics Manipulation project.	<i>Sep 2024 - Present</i>
<b>Research Visitor, Institute of Automation, Chinese Academy of Sciences</b> Advised by Prof. Dongbin Zhao and Prof. Qichao Zhang with Human-like and Safe Autonomous Driving project.	<i>Sep 2023 - Aug 2024</i>
<b>Algorithm Intern, Zeekr Auto</b> Developed real-vehicle motion planning and Automatic Emergency Braking (AEB) algorithms using C++.	<i>May 2023 - Aug 2023</i>

## Research Highlights

<b>DexFlyWheel: A Scalable and Self-improving Data Generation Framework for Dexterous Manipulation</b> Project lead and first author, <b>NeurIPS 2025 Spotlight</b> <a href="#">Project Website</a> 
◦ Leading the development of a novel data generation framework for dexterous manipulation.
◦ Designed and ran all simulation & real-robot experiments, achieving state-of-the-art data diversity and sim-to-real performance.
<b>Continual Residual RL for Fine-Tuning Pretrained Models in Robotic Manipulation</b> (Project lead and first author, ongoing research)
◦ Leading the development of a novel continual learning framework for robotics manipulation.

## Publications

<b>Kefei Zhu</b> , Fengshuo Bai, YuanHao Xiang, <i>et al.</i> , Hao Dong <sup>†</sup> , <i>et al.</i> , “DexFlyWheel: A Scalable and Self-improving Data Generation Framework for Dexterous Manipulation”, <b>NeurIPS 2025 Spotlight</b> . <a href="#">Project Website</a>  .
Pengxuan Yang, Yupeng Zheng, Qichao Zhang <sup>†</sup> , <b>Kefei Zhu</b> , et al., “UncAD: Towards Safe End-to-end Autonomous Driving via Online Map Uncertainty”, <b>ICRA 2025, Accepted</b> . <a href="#">arXiv</a>  .
<b>Kefei Zhu</b> , Qichao Zhang <sup>†</sup> , “StyleFollower: A Two-Stage Car-Following Model for Enhanced Driving Style Diversity and Controllability”, <b>IEEE Transactions on Vehicular Technology, Major Revision</b> .

## Skills

Python, C++, ROS2, Pytorch, Libtorch, Git, OmniGibson, ManiSkill

## Honors & Awards & Scholarships

Outstanding undergraduate graduates of Zhejiang Province	<i>2021</i>
Zhejiang Provincial Government Scholarship	<i>2020</i>
First Prize in Advanced Mathematics and Calculus Competition	<i>2020</i>