Teng LI

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EDUCATION

The Hong Kong University of Science and Technology *2023.09-2027.07 (expected)*
Ph.D. student in Electronic and Computer Engineering
- Supervisor: Prof. Jun Zhang (IEEE Fellow)
- Honors: **Hong Kong PhD Fellowship Scheme (HKPFS)**

Tongji University *2018.09-2022.07*
B.Eng. in Mechanical Engineering
- Supervisor: Prof. Changhong Fu
- GPA: 91.02/100
- Honors: **Shanghai Outstanding Graduates**, **National Scholarship**

RESEARCH INTERESTS

Unified Visual Generation & Understanding, Visual Generation, Multimodal Reasoning

EXPERIENCE

Shanghai AI Laboratory *2024.11-Present*
Research Intern *Shanghai, China*
- Supervisor: Dr. Wenqi Shao
- Working on unified image generation and understanding.
- Proposed a Y-shape unifed model based on modality alignment investigation.

The Hong Kong University of Science and Technology *2023.09-Present*
Research Student *Hong Kong SAR, China*
- Supervisor: Prof. Jun Zhang (IEEE Fellow)
- Worked on video/ image controllable generation and editing with diffusion models.
- Worked on multi-agent cooperative perception for autonomous driving scenarios.
- Proposed a spatial-aware latent initialization method for layout-to-image generation.
- Proposed a task-oriented learnable communication framework for vehicle-to-infrastructure cooperative perception.

Tongji University *2021.05-2022.12*
Research Assistant *Shanghai, China*
- Supervisor: Prof. Changhong Fu
- Worked on UAV object tracking.
- Proposed scale-aware domain adaptation framework for robust UAV tracking.

Tsinghua University *2021.03-2021.05*
Research Intern *Shanghai & Beijing, China*
- Supervisor: Prof. Geng Lu
- Worked on vision-based UAV self-localization.
- Proposed online learning-based UAV self-localization framework by utilizing visual tracking for monocular pose estimation.

WORKING PAPERS

- **Teng Li**, Quanfeng Lu, Lirui Zhao, Hao Li, Xizhou Zhu, Yu Qiao, Jun Zhang, Wenqi Shao. "UniFork: Exploring Modality Alignment for Unified Multimodal Understanding and Generation", arXiv:2506.17202 (2025). [paper] [code]
- Wenqiang Sun, **Teng Li**, Zehong Lin, Jun Zhang. "Spatial-Aware Latent Initialization for Controllable Image Generation", arXiv:2401.16157 (2024). [paper]
- Jiawei Shao, **Teng Li**, Jun Zhang. "Task-Oriented Communication for Vehicle-to-Infrastructure Cooperative Perception", accpeted by *IEEE International Workshop on Machine Learning for Signal Processing (MLSP)*, 2024.
- Changhong Fu, **Teng Li**, Junjie Ye, Guangze Zheng, Sihang Li, Peng Lu. "Scale-Aware Domain Adaptation for Robust UAV Tracking", accepted by *IEEE Robotics and Automation Letters (RA-L)*, 2023. (**first student author**) [paper] [code] [demo]

SELECTED HONORS

Hong Kong PhD Fellowship Scheme (HKPFS)	2023
National Scholarship	2018-2019
Shanghai Outstanding Graduates	2022
Shanghai Government Scholarship.	2019-2020
First-class Scholarship of Tongji University	2020-2021
Outstanding Students of Tongji University	2018-2021
Second Prize of 11th National College Students Mathematical Competition	2019

SKILLS

Language	Chinese (Native); English: TOEFL 97 (R28, L24, S21, W24), GRE 328.5 (V155+Q170+AW3.5)
Programming	Python, MATLAB, C/C++
Framework and Tools	Pytorch, OpenCV, ROS, Git, LaTeX