# **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 EngineeringSupervisor: 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 Laboratory2024.11-PresentResearch InternShanghai, China

• Supervisor: Dr. Wengi Shao

• Working on unified image generation and understanding.

• Proposed a Y-shape unified 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**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", accepted 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
Outstanding Students of Tongji University	2018-2021

## **SKILLS**

Language Chinese (Native); English: TOEFL 97 (R28, L24, S21, W24), GRE 328.5 (V155+Q170+AW3.5)

2019

**Programming** Python, MATLAB, C/C++

Framework and Tools Pytorch, OpenCV, ROS, Git, LaTeX

Second Prize of 11th National College Students Mathematical Competition