# Teng LI

Ph.D. Student at HKUST | +86 15660985365 | tliby@connect.ust.hk

### **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

#### **EXPERIENCE**

Shanghai AI Laboratory 2024.11-Present Shanghai, China Research Intern

Supervisor: Dr. Wengi 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", 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) (Top 300 PhD students in HK per year)	2023
National Scholarship (Top 1%)	2018-2019
Shanghai Outstanding Graduates (Ranking: 1/116)	2022
Shanghai Government Scholarship (Top 1.5%)	2019-2020
First-class Scholarship of Tongji University	2020-2021
Outstanding Students of Tongji University (Top 3%)	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