Yuanpeng Tu

+86-189-1627-3097 | tjtuyuanpeng@gmail.com | Google Scholar
GitHub Profile | Personal website
Hong Kong SAR, China

Education

- **The University of Hong Kong** *09.2023 - now*
  PhD candidate (Computer Science) Hong Kong SAR, China
  - PhD advisor: Prof.Hengshuang Zhao

- **Tongji University** *09.2020 - 03.2023*
  Master (Computer Science) Shanghai, China

- **Tongji University** *09.2016 - 06.2020*
  Bachelor (Computer Science) Shanghai, China

Experience

- **Alibaba Research** *03.2024 - now*
  Research Intern, Mentored by Dr. Hao Luo Hangzhou, China
  - Designing the high-fidelity video object insertion model with precise motion control.
  - Paper submitted to CVPR2025, 1 patent

- **QCraft AI** *03.2023 - 06.2023*
  Research Intern Beijing, China
  - Designing accurate and robust 3D lane detection models.

- **Tencent Youtu Lab** *09.2021 - 03.2023*
  Research Intern, Mentored by Dr. Liang Liu and Dr. Boshen Zhang Shanghai, China
  - Exploring noise-robust and generalized framework designing
  - 4 papers accepted (ECCV24, AAAI24, 2 CVPR23), 2 patents

Awards and Scholarships

HKU Postgraduate Scholarships	2023 - 2027
China Electronics Society Outstanding Master Thesis Prize	2023 - 2023
Shanghai Computer Society Outstanding Master Thesis	2023 - 2023
Shanghai Outstanding Graduates	2023 - 2023
National Scholarship for Graduate Students (Rank 1/350)	2021 - 2022
Scholarship for outstanding Graduate Students (Rank 6/350)	2022 - 2023
Outstanding Graduate Students of Tongji University	2021 - 2023
3rd Place, Out-of-distribution Detection Competition in ECCV2022	2022 - 2022
Second Prize of "Huawei Cup" China Postgraduate Mathematical Modeling Competition	2020 - 2021

Selected Publications

full list on Google Scholar

1. **VideoAnydoor: High-fidelity Video Object Insertion with Precise Motion Control**
   Yuanpeng Tu, Hao Luo, Xi Chen, Sihui Ji, Xiang Bai, Hengshuang Zhao.
   CVPR2025, in submission, Video object insertion model

2. **DreamMask: Boosting Open-vocabulary Panoptic Segmentation with Synthetic Data**
   Yuanpeng Tu, Xi Chen, Ser-Nam Lim, Hengshuang Zhao.
   CVPR2025, in submission

3. **Memory Consistency Guided Divide-and-Conquer Learning for Generalized Category Discovery**
   Yuanpeng Tu, Zhun Zhong, Yuxi Li, Hengshuang Zhao.
   CVPR2025, in submission

4. **DOTA: Decoupled Optimization for Test-Time Adaptation on Noisy Data Streams**
   Yuanpeng Tu, Zhun Zhong, Hengshuang Zhao.
   CVPR2025, in submission

5. **Self-supervised Feature Adaptation for 3D Industrial Anomaly Detection**
   Yuanpeng Tu, Boshen Zhang, Liang Liu, Yuxi Li, Jiangning Zhang, Yabiao Wang, Chengjie Wang, Cai Rong Zhao.
   ECCV2024
6. **Self-supervised Likelihood Estimation with Energy Guidance for Anomaly Segmentation in Urban Scenes**
   Yuanpeng Tu, Yuxi Li, Boshen Zhang, Liang Liu, Jiangning Zhang, Yabiao Wang, Cai Rong Zhao.
   AAAI2024
7. **Learning with Noisy labels via Self-supervised Adversarial Noisy Masking**
   Yuanpeng Tu, Boshen Zhang, Yuxi Li, Liang Liu, Jian Li, Yabiao Wang, Chengjie Wang, Cairong Zhao.
   CVPR2023
8. **Learning from Noisy Labels with Decoupled Meta Label Purifier**
   Yuanpeng Tu, Boshen Zhang, Yuxi Li, Liang Liu, Jian Li, Yabiao Wang, Chengjie Wang, Cairong Zhao.
   CVPR2023
9. **Domain Camera Adaptation and Collaborative Multiple Feature Clustering for Unsupervised Person Re-ID**
   Yuanpeng Tu.
   ACM MM2022
10. **Salience-guided Iterative Asymmetric Mutual Hashing for Fast Person Re-identification**
    Cairong Zhao*, **Yuanpeng Tu***, Zhihui Lai, Fumin Shen, Heng Tao Shen, Duoqian Miao.
    TIP2021
11. **Unleashing Diffusion Transformers for Visual Correspondence**
    Chaofan Gan, **Yuanpeng Tu**, Xi Chen, Tieyuan Chen, Yuxi Li, Mehrtash Harandi, Weiyao Lin.
    CVPR2025, in submission
12. **LayerFlow: A Unified Model for Layer-aware Video Generation**
    Sihui Ji, Hao Luo, Xi Chen, **Yuanpeng Tu**, Yiyang Wang, Hengshuang Zhao.
    CVPR2025, in submission
13. **DAC: 2D-3D Retrieval with Noisy Labels via Divide-and-Conquer Alignment and Correction**
    Chaofan Gan, **Yuanpeng Tu**, Yuxi Li, Weiyao Lin.
    ACM MM2024
14. **Content-Adaptive Auto-Occlusion Network for Occluded Person Re-Identification**
    Cairong Zhao, Zefan Qu, Xinyang Jiang, **Yuanpeng Tu**, Xiang Bai.
    TIP2023
15. **Learning from Noisy Labels with Coarse-to-fine Sample Credibility Modeling**
    Boshen Zhang, Yuxi Li, **Yuanpeng Tu**, Jinlong Peng, Yabiao Wang, Cunlin Wu, Yang Xiao, Cairong Zhao.
    ECCV2022 Workshop

Acdemic Activities

Reviewer: CVPR, ICCV, ECCV, NeurIPS, AAAI, ICLR, IJCV, TCSVT, *etc*.