PENG Zhuoxuan 彭卓轩

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Education

The Hong Kong University of Science and Technology   2024-Present

    Ph.D. in Computer Science and Engineering

    Supervisor: Prof. CHAN Shueng Han Gary

The Hong Kong University of Science and Technology   2022-2024

    M.Phil. in Computer Science and Engineering

    Supervisor: Prof. CHAN Shueng Han Gary

    CGA: 3.9/4.3

The Hong Kong University of Science and Technology   2018-2022

    B.Sc. in Computer Science (Double majored in Mathematics)

    CGA: 3.7/4.3 (First Class Honor Graduation)

Research Interest

3D Human Sensing (LiDAR, mmWave) / Human Action Recognition / Human Pose Estimation / Crowd Counting / Video Understanding

Publications

[CVPR2026] Expanding mmWave Datasets for Human Pose Estimation with Unlabeled Data and LiDAR Datasets   2026.6

    Zhuoxuan Peng, *Boan Zhu, Xingjian Zhang, Wenying Li, Gary S.-H. Chan*

    Preprint: https://arxiv.org/abs/2603.14507

    Github: https://github.com/Shimmer93/EMDUL

[CVPR2025 Workshop] Revisiting Referring Expression Comprehension Evaluation in the Era of Large Multimodal Models   2025.6

    Jierun Chen, Fangyun Wei, Jinjing Zhao, Sizhe Song, Bohuai Wu, ***Zhuoxuan Peng***, *S.-H. Chan, Hongyang Zhan*

    Preprint: https://arxiv.org/abs/2406.16866

[CVPR2024] Single Domain Generalization for Crowd Counting   2024.6

    Zhuoxuan Peng, *Gary S.-H. Chan*

    Preprint: https://arxiv.org/abs/2403.09124

    Github: https://github.com/Shimmer93/MPCount

[ECCV2022 Workshop] CounTr: End-to-end Single Image Crowd Counting with Transformer   2022.10

    Haoyue Bai, Hao He, ***Zhuoxuan Peng***, *Tianyuan Dai, Gary S.-H. Chan*

    DOI: https://doi.org/10.1007/978-3-031-25075-0_16

Work Experience

MSRA Research Intern: High-Quality Human Speaking Video Generation   2025.10-2025.12

    Mentor: Mr. LI Chong

    I worked on high-quality human video generation.

GZPI Part-Time Intern: Detection-based Object Counting in Huge Images   2025.3-2025.7

    Coworker: Mr. HU Xin

    I developed a system for detection-based object counting, which was employed to count geese, rubbish, etc., in super-huge drone-captured images.

Manycore Inc. Research Intern: Sketch-based Modeling Using Geometric Constraints   2022.5-2022.8

Supervisor: Dr. ZHOU Zihan

I worked on 3D reconstruction of hand-drawn wireframes based on geometric constraints. The study aimed to utilize neural networks to learn geometric constraints (parallel lines, perpendicular lines, coplanar lines, etc.) in hand-drawn wireframes and reconstruct credible 3D models accordingly.

Teaching Assistant

COMP2011: Programming with C++	Expected 2025.9-2025.12
COMP5911: Entrepreneurial Me	2025.2-2025.5
COMP2011: Programming with C++	2023.9-2023.12
COMP4321: Search Engines for Web and Enterprise Data	2023.2-2023.5

Selected Awards

HKUST: Postgraduate Scholarship	2022-Present
HKUST: First Class Honor Graduation	2022
HKUST: The Most Adorable Idea Award in HackUST2021	2021
HKUST: Dean's List	2018-2021
HKUST: University's Scholarship Scheme for Continuing Undergraduate Students	2018-2019

Academic Services

Reviewer: AAAI (26), CVPR (25), TNNLS (25), TPAMI (24), TIP (25), TMM (24), INFOCOM (22, 23, 24), MICCAI (24)

Skills

Programming: Python, Java, C++, JavaScript

Tools: PyTorch, LaTeX, Unix, Git, Django

Languages: English (Proficient), Japanese (Elementary), Mandarin (Native)

Others

Excellent Creator on Zhihu

I write answers on Zhihu and am certified as an "Excellent creator".

Personal Homepage: https://www.zhihu.com/people/shi_mmer