

PENG Zhuoxuan 彭卓轩

zpengac@cse.ust.hk | pzx200420@live.com | +86 18207145082 | +852 51226607 | [Homepage](#)

Education

The Hong Kong University of Science and Technology	2024-Present
Ph.D. in Computer Science and Engineering	
Supervisor: <u>Prof. CHAN Shueng Han Gary</u>	
The Hong Kong University of Science and Technology	2022-2024
M.Phil. in Computer Science and Engineering	
Supervisor: <u>Prof. CHAN Shueng Han Gary</u>	
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

[CVPR2025 Workshop] Revisiting Referring Expression Comprehension Evaluation in the Era of Large Multimodal Models	2025.6
<i>Jierun Chen, Fangyun Wei, Jinjing Zhao, Sizhe Song, Bohuai Wu, Zhuoxuan Peng, S.-H. Chan, Hongyang Zhan</i>	
Preprint: https://arxiv.org/abs/2406.16866	
[CVPR2024] Single Domain Generalization for Crowd Counting	2024.6
<i>Zhuoxuan Peng, Gary S.-H. Chan</i>	
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
<i>Haoyue Bai, Hao He, Zhuoxuan Peng, Tianyuan Dai, Gary S.-H. Chan</i>	
DOI: https://doi.org/10.1007/978-3-031-25075-0_16	

Work Experience

GZPI Part-Time Intern: Detection-based Object Counting in Huge Images	2025.3-2025.7
Coworker: <u>Mr. HU Xin</u>	
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: <u>Dr. ZHOU Zihan</u>	
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