

# Chenhang He

PhD Candidate in The Hong Kong Polytechnic University

Email: [csche@comp.polyu.edu.hk](mailto:csche@comp.polyu.edu.hk)

Phone: (+852) 54923190

Website: [skyhehe123.github.io](https://skyhehe123.github.io)

Scholar: [Chenhang HE](#)

## EDUCATION

---

**Doctor of Philosophy (PhD)** 2019.03 - 2023.06

Department of Computing, The Hong Kong Polytechnic University

Advisor: Lei Zhang

**Master of Philosophy (MPhil)** 2016.09 - 2018.06

Department of Electronic and Information Engineering, The Hong Kong Polytechnic University

Advisor: Kin-Man Lam

**Bachelor of Science** 2011.09 - 2016.06

Department of Electronic and Information Engineering, The Hong Kong Polytechnic University

GPA: 3.7/4.0, Dean's Honor List

## PUBLICATION

---

- **Chenhang He**, Ruihuang Li, Yabin Zhang, Shuai Li, Lei Zhang, "MSF: Motion-guided Sequential Fusion for Efficient 3D Object Detection from Point Cloud Sequences", in **CVPR 2023**.
- **Chenhang He**, Ruihuang Li, Lei Zhang, "Voxel Set Transformer: A Set-to-Set Approach to 3D Object Detection from Point Clouds", in **CVPR 2022**.
- **Chenhang He**, Hui Zeng, Jianqiang Huang, Xian-Sheng Hua and Lei Zhang, "Structure Aware Single-stage 3D Object Detection from Point Cloud", in **CVPR 2020**.
- Ruihuang Li\*, **Chenhang He**\*, Yabin Zhang, Shuai Li, Liyi Chen, Lei Zhang, "SIM: Semantic-aware Instance Mask Generation for Box-Supervised Instance Segmentation", in **CVPR 2023**.
- Ruihuang Li\*, **Chenhang He**\*, Shuai Li, Yabin Zhang, Lei Zhang, "DynaMask: Dynamic Mask Selection for Instance Segmentation", in **CVPR 2023**.
- Weiwei Lin\*, **Chenhang He**\*, Man-Wai Mak, Youzhi Tu, "Self-supervised Neural Factor Analysis for Disentangling Utterance-level Speech Representations", in **ICML 2023**.
- Shuai Li, Minghan Li, Ruihuang Li, **Chenhang He**, Lei Zhang, "One-to-Few Label Assignment for End-to-End Dense Detection", in **CVPR 2023**.
- Shuai Li, **Chenhang He**, Lei Zhang, "A Dual Weighting Label Assignment Scheme for Object Detection", in **CVPR 2022**.
- Ruihuang Li, Shuai Li, **Chenhang He**, Yabin Zhang, Xu Jia and Lei Zhang, "Class-Balanced Pixel-Level Self-Labeling for Domain Adaptive Semantic Segmentation", in **CVPR 2022**.
- **Chenhang He** and Lei Zhang, "Improving Monocular 3D Object Detection by Synthetic Images with Virtual Depth", accepted as a book chapter by the *Towards Realistic 3D Deep Learning: Algorithms and Applications*, World Scientific, 2023
- **Chenhang He**, Shun-Cheung Lai and Kin-man Lam, "Improving Object Detection with Relation Graph Inference", in **ICASSP 2019**.
- **Chenhang He**, Kin-man Lam, "Fast Vehicle Detection with Lateral Convolutional Neural Network", in **ICASSP 2018**.

---

\*Equal contribution

## INTERNSHIP EXPERIENCE

---

DAMO Academy, Alibaba Group

2019.06 - 2021.11

## PROFESSIONAL ACTIVITIES

---

- Reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2021
- Reviewer: IEEE Transactions on Image Processing (TIP) 2021
- Reviewer: Pattern Recognition (PR) 2021
- Reviewer: IEEE Robotics and Automation Letters (RA-L) 2021
- Reviewer: IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2022, 2023
- Reviewer: European Conference on Computer Vision (2020)