Zilong Huang

Nanyi Building, 1037 Luoyu Road, Wuhan, 430074, China

□ (+86) 15308651323

☑ hzl@hust.edu.cn

github.com/speedinghzl

EDUCATION

Huazhong University of Science and Technology

Wuhan, China

Ph.D. student in Computer Vision and Machine Learning

2016.9-2020 (excepted)

Advisor: Wenyu Liu, Xinggang Wang

University of Illinois at Urbana-Champaign

Urbana, USA

Visiting Ph.D. student in Computer Vision and Machine Learning

2018.10-2019.10

Advisor: Thomas Huang

Huazhong University of Science and Technology

Wuhan, China

Master student in Electronic Information Engineering

2015.9-2016.6

Advisor: Wenyu Liu, Xinggang Wang

Huazhong University of Science and Technology

Wuhan, China

B.S. in Electronic Information Engineering

2011.9-2015.6

Dian Group, Seed Class

RESEARCH INTERESTS

Deep learning, semantic segmentation in images/videos, object detection, weakly supervised learning

PUBLICATIONS

AlignSeg: Feature-Aligned Segmentation Networks. Submit to TPAMI.

Zilong Huang, Yunchao Wei, Xinggang Wang, Honghui Shi, Zhao Li, Wenyu Liu, Thomas Huang.

CCNet: Criss-Cross Attention for Semantic Segmentation. TPAMI 2020 (minor revision).

Zilong Huang, Xinggang Wang, Yunchao Wei, Lichao Huang, Honghui Shi, Wenyu Liu, Thomas Huang.

Motion-Guided Spatial Time Attention for Video Object Segmentation. ICCV 2019 Workshop.

Qiang Zhou, **Zilong Huang**, Lichao Huang, Yongchao Gong, Han Shen, Wenyu Liu, Xinggang Wang. Ranked No. 2 of Youtube Video Object Segmentation Challenge 2019.

Semantic Image Segmentation by Scale-Adaptive Networks. TIP 2019.

Zilong Huang, Chunyu Wang, Xinggang Wang, Wenyu Liu, Jingdong Wang.

Proposal, Tracking and Segmentation: A Cascaded Network for Video Object Segmentation. ArXiv2019

Zilong Huang*, Qiang Zhou*, Xinggang Wang, Yongchao Gong, Han Shen, Lichao Huang, Chang Huang, Wenyu Liu. Ranked No. 2 of Youtube Video Object Segmentation Challenge 2018.

CCNet: Criss-Cross Attention for Semantic Segmentation. ICCV 2019.

Zilong Huang, Xinggang Wang, Lichao Huang, Chang Huang, Yunchao Wei, Wenyu Liu.

More than 100+ citations in Google Scholar and 800+ stars in Github.

SPGNet: Semantic Prediction Guidance for Scene Parsing. ICCV 2019.

Bowen Cheng, Liang-Chieh Chen, Yunchao Wei, Yukun Zhu, Zilong Huang, Jinjun Xiong, Thomas Huang, Wen-Mei Hwu, Honghui Shi.

Devil in the Details: Towards Accurate Single and Multiple Human Parsing. AAAI 2019.

Tao Ruan*, Ting Liu*, **Zilong Huang**, Yunchao Wei, Shikui Wei, Yao Zhao, Thomas Huang. Ranked No. 1 on all human parsing tracks in the 2nd LIP Challenge 2018.

A PyTorch Semantic Segmentation Toolbox. Technical report 2018.

Zilong Huang, Yunchao Wei, Xinggang Wang, Wenyu Liu.

More than 600+ stars in Github.

Weakly-supervised semantic segmentation network with deep seeded region growing. CVPR 2018.

Zilong Huang, Xinggang Wang, Jiasi Wang, Wenyu Liu, Jingdong Wang.

Object-level proposals. ICCV 2017.

Jianxiang Ma, Anlong Ming, **Zilong Huang**, Xinggang Wang, Yu Zhou.

Deep patch learning for weakly supervised object classification and discovery. PR 2017.

Peng Tang, Xinggang Wang, Zilong Huang, Xiang Bai, Wenyu Liu.

Point linking network for object detection. ArXiv 2017.

Xinggang Wang, Kaibing Chen, Zilong Huang, Cong Yao, Wenyu Liu.

EXPERIENCES

Horizon Robotics Beijing, China

Research Intern (Algorithm Platform)

Mar 2018 - Sep 2018

Mentor: Lichao Huang

Microsoft Research Asia (MSRA)

Beijing, China

Research Intern (Internet Media group)

Mar 2016 - Oct 2016

Mentor: Jingdong Wang, Chunyu Wang

Media and Communication Lab, HUST Wuhan, China

Research Assistant Sep 2015 - Mar 2016

Mentor: Wenyu Liu, Xinggang Wang

ACADEMIC ACTIVITIES

ECCV18 Large-scale Video Object Segmentation Challenge Workshop talk: "Proposal Tracking and Segmentation (PTS): A cascaded network for video object segmentation", 2018.

- o VALSE Pixel Level Image Understanding Workshop talk: "Weakly-Supervised Semantic Segmentation Network with Deep Seeded Region Growing", 2018.
- Reviewer for the following journals/conferences: TPAMI/TIP/TCSVT/Neurocomputing/CVPR 2019-2020/ICCV 2019/ECCV 2020.
- o Member of the Program Committee (PC) for AAAI-2020.

AWARDS AND ACHIEVEMENTS

- 2nd Place in the 2st Large-scale Video Object Segmentation Challenge Workshop in conjunction with ICCV 2019, Seoul, Korea. Oct. 2019.
- 2nd Place in the 1st Large-scale Video Object Segmentation Challenge Workshop in conjunction with ECCV 2018, Munich, Germany. Sep. 2018.
- o Merit Award (Top 20/843) of Alibaba Large-scale Image Search Challenge, Dec. 2015.
- o National Ph.D. Scholarship, Ministry of Education, China, 2019.
- Zhixing Graduate Student Scholarship, HUST, 2019.
- o Outstanding Graduate, HUST, 2015.

SKILLS

- **Programming**: Reasonably familiar with Python, Java, C/C++ and CUDA. Good spirit of open source with >1.8k stars in Github.
- Computer vision and machine learning: Familiar with several CV/ML algorithms including semantic segmentation, object detection/recognition, pose estimation, video object segmentation and convolutional neural networks. Proficient in deep learning framework Caffe and Pytorch, as well as general purpose libraries including OpenCV, scikit-learn and VLFeat.
- Natural languages: Mandarin (Native); English (Familiar).