

### Ph.D. Student · Tsinghua University

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# **Education**

### Tsinghua University (THU)

Beijing, China

Ph.D. Student Department of Computer Science and Technology

2018/09 – 2023/06 (Expected)

- · Advisor: Prof. Xiaolin Hu
- TSAIL Group (directed by Prof. Bo Zhang and Prof. Jun Zhu)
- Research interests: deep learning and computer vision, especially on instance-level detection/segmentation, label-efficient learning, language-driven visual recognition, AI for (biomedical) science, brain-inspired AI, etc.

### **Huazhong University of Science and Technology (HUST)**

Wuhan, China

B.Eng. School of Computer Science and Technology

2014/09 - 2018/06

- GPA: 3.97/4.0 Grade: 90.4/100 Rank: 4/260
- Thesis: Attribute Recognition with Multi-task Learning (Outstanding Bachelor Thesis)

# **Experience**

### Huawei Technologies Co., Ltd.

Beijing, China

Research Intern 2020/09 - Present

- · Advisor: Prof. Qi Tian and Dr. Lingxi Xie
- Research topics: detection/segmentation, language-driven visual recognition, label-efficient learning, etc.

### SenseTime Group Inc.

Beijing, China

Research Intern 2017/08 - 2018/07

- · Advisor: Dr. Jing Shao
- Research topics: pedestrian attribute recognition, intelligent surveillance, multi-task learning, continual learning, etc.

#### **Tsinghua University**

Beijing, China

Teaching Assistant 2018, 2019, 2020

- 2018 Fall. Introduction to Deep Learning (THU-00240332), instructed by Prof. Xiaolin Hu
- 2019 Summer. Tsinghua University Deep Learning 2019 Summer School
- 2019 Fall. Introduction to Deep Learning (THU-00240332), instructed by Prof. Xiaolin Hu
- 2020 Spring. Deep Learning (THU-80240743), instructed by Prof. Xiaolin Hu and Prof. Jun Zhu
- 2020 Fall. Neural and Cognitive Computation (THU-80240642), instructed by Prof. Xiaolin Hu

# **Publications**

### **Visual Recognition by Request**

Under Review (2022)

Chufeng Tang, Lingxi Xie, Xiaopeng Zhang, Xiaolin Hu, Qi Tian

# Focal Distillation from High-Resolution Data to Low-Resolution Data for 3D Object Detection

Under Review (2022)

Jiawei Shan, Gang Zhang, Chufeng Tang, Hujie Pan, Qiankun Yu, Guanhao Wu, Xiaolin Hu

## **Dense Contrastive Loss for Instance Segmentation**

Under Review (2022)

Hang Chen, Chufeng Tang, Xiaolin Hu

### **Improving Image Segmentation with Boundary Patch Refinement**

IJCV 2022

Xiaolin Hu<sup>†</sup>, **Chufeng Tang**, Hang Chen, Xiao Li, Jianmin Li, Zhaoxiang Zhang (Chufeng Tang is the **first student author** except the supervisor)

(Impact Factor: 13.37)

### **Active Pointly-Supervised Instance Segmentation**

ECCV 2022

**Chufeng Tang**, Lingxi Xie, Gang Zhang, Xiaopeng Zhang, Qi Tian<sup>†</sup>, Xiaolin Hu<sup>†</sup>

Tel Aviv, Israel

## Look Closer to Segment Better: Boundary Patch Refinement for Instance Segmentation

**Chufeng Tang**\*, Hang Chen\*, Xiao Li, Jianmin Li, Zhaoxiang Zhang, Xiaolin Hu<sup>†</sup>

CVPR 2021 VIRTUAL

Improving Pedestrian Attribute Recognition With Weakly-Supervised Multi-Scale Attribute-Specific Localization

ICCV 2019

**Chufeng Tang**, Lu Sheng, Zhaoxiang Zhang, Xiaolin Hu<sup>†</sup>

Seoul, Korea

# Projects\_\_\_\_\_

### **Automated Large-Scale 3D Neuron Reconstruction with Deep Learning**

Beijing, China

Al for Biomedical Science

2021/06 - Present

- Goal: identifying brain-wide neural connectivity/morphology from optical microscopy images.
- Key technical problems: neural signal segmentation (distinguish all axonal processes from background), neuron tracing (trace individual segments into a compact neuron), etc.
- An interdisciplinary research project, cooperated with Prof. Zengcai Guo and Prof. Song-Hai Shi at the IDG/McGovern Institute for Brain Research, Tsinghua University.

# Honors & Awards

2018	Outstanding Bachelor Thesis Award, Huazhong University of Science and Technology	Wuhan, China
2018	Outstanding Graduates, Huazhong University of Science and Technology	Wuhan, China
2017	National Scholarship, Ministry of Education	China
2017	Outstanding Undergraduate Award, China Computer Federation (CCF)	China
2017	<b>Gold Award</b> , The CCF Collegiate Computer Systems & Programming Contest (CCF-CCSP)	Beijing, China
2016	Bronze Medal, The 2016 ACM-ICPC Asia Qingdao Regional Contest	Qingdao, China
2016	National Endeavor Scholarship, Ministry of Education	China
2015	Bronze Medal, The 2015 ACM-ICPC Asia Hefei Regional Contest	Hefei, China
2015	Merit Student, Huazhong University of Science and Technology	Wuhan, China

## Skills\_\_\_\_\_

ProgrammingPython, C/C++, etc.Deep Learning ToolsPyTorch, Caffe, etc.PlatformmacOS, Linux, Windows

**Languages** English(Fluent), Mandarin(Native speaker)