

## Tingting Liang

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<https://tingtingliangvs.github.io/>

### EDUCATION

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#### Peking University

Sept 2018 - Jul.2023 (expected)

Ph.D., Applied Computer Technology, School of Electronics Engineering and Computing Science

Advisor: Prof. Zhi Tang, Prof. Yongtao Wang

#### Beijing University of Posts and Telecommunications

Sept 2014 - Jul 2018

B.E., Network Engineering, School of Computer Science

### INTERN AND RESEARCH EXPERIENCE

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#### DAMO Academy, Alibaba Group

Jan 2022 - Jun 2022

Research Intern

Mentor: Dr.Bing Wang and Dr. Kaicheng Yu

### RESEARCH INTERESTS

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I am excited about developing deep models with hand-designed and automated search methods to solve computer vision challenges. Currently, my research focuses on learning 2D and 3D representations of objects and scenes towards improving accuracy and robustness of perception tasks in complex environments.

### PUBLICATIONS & PREPRINTS

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1. BEVFusion: A Simple and Robust LiDAR-Camera Fusion Framework  
**Tingting Liang**, Hongwei Xie, Kaicheng Yu, Zhongyu Xia, Zhiwei Lin, Yongtao Wang, Bing Wang, Zhi Tang  
*Neural Information Processing Systems, **NeurIPS** 2022.* [paper](#), [talk](#), [code](#) (☆ 300+) , [blog](#)
2. CBNet: A Composite Backbone Network Architecture for Object Detection  
**Tingting Liang**, Xiaojie Chu, Yudong Liu, Yongtao Wang, Zhi Tang, Wei Chu, Jingdong Chen, Haibin Ling  
*IEEE Transactions on Image Processing, **TIP**.* [paper](#), [code](#) (☆ 300+), [blog](#)
3. OPANAS: One-Shot Path Aggregation Network Architecture Search for Object Detection  
**Tingting Liang**, Yongtao Wang, Guosheng Hu, Zhi Tang, Haibin Ling  
*IEEE Conference on Computer Vision and Pattern Recognition, **CVPR** 2021.* [paper](#), [talk](#), [code](#), [blog](#)
4. CBNet: A Novel Composite Backbone Network Architecture for Object Detection  
Yudong Liu, Yongtao Wang, Siwei Wang, **Tingting Liang**, Qijie Zhao, Zhi Tang, Haibin Ling  
*Association for the Advancement of Artificial Intelligence, **AAAI** 2020.* [paper](#), [code](#)
5. Pyramidal Region Context Module for Semantic Segmentation  
**Tingting Liang**, Qijie Zhao, Zhuoying Wang, Kaiyu Shan, Huan Zhang, Yongtao Wang, Zhi Tang  
*In Proceedings of the ACM Turing Celebration Conference - **China ACM TURC**' 2019.* [paper](#)
6. APNet: Semantic Segmentation for Pelvic MR Image  
**Ting-Ting Liang**, Mengyan Sun, Liangcai Gao, Jing-Jing Lu, Satoshi Tsutsui  
*Chinese Conference on Pattern Recognition and Computer Vision, **PRCV** 2018.* [paper](#)
7. Benchmarking the Robustness of LiDAR-Camera Fusion for 3D Object Detection  
Kaicheng Yu, Tang Tao, Hongwei Xie, Zhiwei Lin, Zhongwei Wu, Zhongyu Xia, **Tingting Liang**, Haiyang Sun, Jiong Deng, Dayang Hao, Yongtao Wang, Xiaodan Liang, Bing Wang  
Under review. [paper](#), [code](#)
8. FlowNAS: Neural Architecture Search for Optical Flow Estimation  
Zhiwei Lin\*, **Tingting Liang\***, Taihong Xiao\*, Yongtao Wang, Zhi Tang, Ming-Hsuan Yang  
Under review. [paper](#), [code](#)

### TEACHING EXPERIENCE

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#### Teaching Assistant at Peking University

Introduction to Computing

Fall 2018 - Spring 2019

## SKILLS

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Programming: Python (Pytorch)

Languages: Mandarin, English (IELTS: 7)

## AWARDS AND SCHOLARSHIPS

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Merit Student, Peking University *2021*

Outstanding Graduate Student, Beijing *2018*

Tang Jun & Sun Chunlan Scholarship, Beijing University of Posts and Telecommunications *2017*

First Class Scholarship, Beijing University of Posts and Telecommunications *2015 – 2016*

Second Prize, National High School Mathematics & Physics Competition, Sichuan Province *2012*

## REFEREES

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Prof. Haibin Ling, Email: hling@cs.stonybrook.edu

Prof. Ming-Hsuan Yang, Email: myang37@ucmerced.edu

Prof. Zhi Tang, Email: tangzhi@pku.edu.cn