

# Yongming Rao

+86 18801323481 • raoyongming95@gmail.com  
raoyongming.github.io

## Education

<b>Department of Automation, Tsinghua University</b> PhD student in Computer Vision Advisor: Prof. Jiwen Lu	Beijing, China 2018-present
<b>Department of Electronic Engineering, Tsinghua University</b> B.E. in Electronic Engineering	Beijing, China 2014-2018
<b>PBC School of Finance, Tsinghua University</b> Minor in Finance	Beijing, China 2015-2018

## Academic Experience

<b>Multimedia Lab, The Chinese University of Hong Kong</b> <i>Research assistant advised by Prof. Dahua Lin</i>	Jul 2017 - Sept 2017
<b>Megvii Research</b> <i>Research intern advised by Dr. Xiangyu Zhang and Dr. Jian Sun</i>	Apr 2017 - Jul 2017

## Publications

\* indicates equal contribution

### Manuscripts under Review

- [1] **Yongming Rao**, Ji Lin, Jiwen Lu, and Jie Zhou  
**Dynamic Progressive Pruning for Efficient Video Classification**  
in Submission, 2019
- [2] **Yongming Rao**, Benlin Liu, Shaohui Liu, Jiwen Lu, and Jie Zhou  
**Learning Local Deformations for Skeleton-based Human Analysis**  
in Submission, 2019
- [3] Benlin Liu\*, **Yongming Rao\***, Shaohui Liu, Jiwen Lu, and Jie Zhou  
**Rethinking Adversarial Feature Generation for Zero-Shot Learning**  
in Submission, 2019
- [4] Cheng Ma, **Yongming Rao**, Zhenyu Jiang, Jiwen Lu, and Jie Zhou  
**Improving Image Super-Resolution via Multi-Scale Discrimination**  
in Submission, 2019
- [5] Yansong Tang, Yi Wei, Xumin Yu, **Yongming Rao**, Jiwen Lu, and Jie Zhou  
**Graph Interaction Networks for Relation Transfer**  
in Submission, 2019

### Peer-Reviewed Conference Publications

- [6] **Yongming Rao**, Jiwen Lu, and Jie Zhou  
**Spherical Fractal Convolution Neural Networks for Point Cloud Recognition**  
2018 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019
- [7] Yansong Tang, Dajun Ding, **Yongming Rao**, Yu Zheng, Danyang Zhang, Lili Zhao, Jiwen Lu, and Jie Zhou  
**COIN: A Large-scale Dataset for Comprehensive Instruction Video Analysis**  
2018 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019
- [8] **Yongming Rao**, Dahua Lin, Jiwen Lu, and Jie Zhou  
**Learning Globally Optimized Object Detector via Policy Gradient**  
2018 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018 **spotlight**
- [9] Ji Lin\*, **Yongming Rao\***, Jiwen Lu, and Jie Zhou  
**Runtime Neural Pruning**  
The Thirty-first Annual Conference on Neural Information Processing Systems (NeurIPS), 2017

- [10] **Yongming Rao**, Ji Lin, Jiwen Lu, and Jie Zhou  
**Learning Discriminative Aggregation Network for Video-Based Face Recognition**  
 2017 IEEE International Conference on Computer Vision (ICCV), 2017 **spotlight**
- [11] **Yongming Rao**, Jiwen Lu, and Jie Zhou  
**Attention-aware Deep Reinforcement Learning for Video Face Recognition**  
 2017 IEEE International Conference on Computer Vision (ICCV), 2017
- [12] Bilong Shen, Ying Zhao, Guoliang Li, Weimin Zheng, Yue Qin, Bo Yuan, and **Yongming Rao**  
**V-tree: Efficient KNN Search on Moving Objects with Road-Network Constraints**  
 2017 IEEE 33rd International Conference on Data Engineering (ICDE), 2017

### Peer-Reviewed Journal Publications

- [13] **Yongming Rao**, Jiwen Lu, and Jie Zhou  
**Learning Discriminative Aggregation Network for Video-based Face Recognition and Person Re-identification**  
 International Journal of Computer Vision (IJCV, IF: 11.54), 2018
- [14] **Yongming Rao**, Jiwen Lu, Ji Lin, and Jie Zhou  
**Runtime Network Routing for Efficient Image Classification**  
 IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI, IF: 9.45), 2018

### Talks

---

- **Learning Globally Optimized Object Detector via Policy Gradient**  
*CVPR'2018 Spotlight Presentation* June 2018
- **Runtime Neural Pruning**  
*Invited Presentation at The 15th China Workshop on Machine Learning and Applications (MLA'2017)* Nov 2017
- **Learning Discriminative Aggregation Network for Video-Based Face Recognition**  
*ICCV'2017 Spotlight Presentation* Oct 2017

### Honors and Awards

---

- 1st place in Momenta Lane Detection Challenge 2018
- 2017 Sensetime Undergraduate Scholarship 2017
- 1st place in 17th Electronic Design Contest of Tsinghua University 2016

### Academic Services

---

#### Co-Organizer

- Tutorial on Deep Reinforcement Learning for Computer Vision at CVPR 2019.

#### Journal Reviewer

- International Journal of Computer Vision (IJCV)

#### Conference Reviewer

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018, 2019)
- International Conference on Machine Learning (ICML 2019)
- International Conference on Computer Vision (ICCV 2019)
- Neural Information Processing Systems (NeurIPS 2019)
- IEEE International Conference on Multimedia and Expo (ICME 2019)
- Asian Conference on Computer Vision (ACCV 2018)
- International Conference on Pattern Recognition (ICPR 2018)
- IEEE International Conference on Image Processing (ICIP 2018, 2019)