联系方式 清华大学中央主楼 616

中国北京, 100084

电话: (+86)18800127138

个人主页: www.yizenghan.top

邮箱: hanyz18@mails.tsinghua.edu.cn

研究领域 深度学习和计算机视觉,尤其是资源受限场景下的高效学习和动态神经网络。

教育经历 博士,清华大学自动化系

2018 至今

导师: 宋士吉, 黄高 (DenseNet 一作, CVPR 2017 最佳论文奖)

本科, 清华大学自动化系

2014 - 2018

GPA 排名: 38/141

实习经历 旷视科技,基础模型组

04/2023 至今

导师: 张祥雨 (ResNet 二作, ShuffleNet 一作, CVPR 2016 最佳论文奖)

佐治亚理工, 人机交互学院

06/2017 - 8/2017

导师: Gregory D Abowd

奖励与荣誉

 - 研究生综合奖学金, 清华大学
 2023

 - 国家奖学金, 教育部
 2022

 - 综合优秀奖学金, 清华大学
 2017

 - 综合优秀奖学金, 清华大学
 2017

- 学业优秀奖学金, 清华大学 2015

# 已发表论文

- Yizeng Han\*, Gao Huang\*, Shiji Song, Le Yang, Honghui Wang, Yulin Wang. Dynamic neural networks: a survey. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (TPAMI), 2021.
- 2. **Yizeng Han**, Gao Huang, Shiji Song, Le Yang, Yitian Zhang, Haojun Jiang. Spatially adaptive feature refinement for efficient inference. *IEEE Transactions on Image Processing* (**TIP**), 2021.
- 3. Yizeng Han\*, Dongchen Han\*, Zeyu Liu, Yulin Wang, Xuran Pan, Yifan Pu, Chao Deng, Junlan Feng, Shiji Song, Gao Huang. Dynamic Perceiver for Efficient Visual Recognition. *International Conference on Computer Vision* (ICCV), 2023.
- 4. **Yizeng Han\***, Zhihang Yuan\*, Yifan Pu\*, Chenhao Xue, Shiji Song, Guangyu Sun, Gao Huang. Latency-aware Spatial-wise Dynamic Networks. *Conference on Neural Information Processing Systems* (**NeurIPS**), 2022.

- 5. **Yizeng Han\***, Yifan Pu\*, Zihang Lai, Chaofei Wang, Shiji Song, Junfeng Cao, Wenhui Huang, Chao Deng, Gao Huang. Learning to Weight Samples for Dynamic Early-exiting Networks. *European Conference on Computer Vision* (**ECCV**), 2022.
- Le Yang\*, Yizeng Han\*, Xi Chen, Shiji Song, Jifeng Dai, Gao Huang. Resolution adaptive networks for efficient inference. Conference on Computer Vision and Pattern Recognition (CVPR), 2020.
- 7. Yifan Pu\*, **Yizeng Han**\*, Yulin Wang, Junlan Feng, Chao Deng, Gao Huang. Fine-grained Recognition with Learnable Semantic Data Augmentation. *IEEE Transactions on Image Processing* (**TIP**), 2023.
- 8. Zhuofan Xia, Dongchen Han, **Yizeng Han**, Xuran Pan, Shiji Song, Gao Huang. GSVA: Generalized Segmentation via Multimodal Large Language Models. *Conference on Computer Vision and Pattern Recognition* (CVPR), 2024.
- 9. Yong Xien Chng, Henry Zheng, **Yizeng Han**, Xuchong Qiu, Gao Huang. Mask Grounding for Referring Image Segmentation. Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
- 10. Dongchen Han, Xuran Pan, **Yizeng Han**, Shiji Song, Gao Huang. FLatten Transformer: Vision Transformer using Focused Linear Attention. *International Conference on Computer Vision* (**ICCV**), 2023.
- 11. Yifan Pu, Yiru Wang, Zhuofan Xia, **Yizeng Han**, Yulin Wang, Weihao Gan, Zidong Wang, Shiji Song, Gao Huang. Adaptive Rotated Convolution for Rotated Object Detection. *International Conference on Computer Vision* (**ICCV**), 2023.
- 12. Yulin Wang, Zhaoxi Chen, Haojun Jiang, Shiji Song, **Yizeng Han**, G Huang. Adaptive Focus for Efficient Video Recognition. *International Conference on Computer Vision* (ICCV, Oral), 2021.
- 13. Chaofei Wang, Jiayu Xiao, **Yizeng Han**, Qisen Yang, Shiji Song, Gao Huang. Towards learning spatially discriminative feature representations. *International Conference on Computer Vision* (**ICCV**), 2021.
- 14. Le Yang, Xiaoli Gong, Zhengwei Wu, Yizeng Han, Lijun He, Fan Li. Dark-channel mixed attention based neural networks for smoke detection in fog environment. ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), 2021.
- 15. Cheng Zhang, Qiuyue Xue, Anandghan Waghmare, Ruichen Meng, Sumeet Jain, Yizeng Han, Xinyu Li, Kenneth Cunefare, Thomas Ploetz, Thad Starner, Omer Inan, Gregory D Abowd. FingerPing: Recognizing fine-grained hand poses using active acoustic on-body sensing. Proceedings of the CHI Conference on Human Factors in Computing Systems, 2018.

#### 投稿与预印

- 1. **Yizeng Han\***, Zeyu Liu\*, Zhihang Yuan\*, Yifan Pu, Gao Huang, Shiji Song. Latency-aware Unified Dynamic Networks For Efficient Image Recognition. *Arxiv preprint*.
- Dongchen Han\*, Tianzhu Ye\*, Yizeng Han, Zhuofan Xia, Shiji Song, Gao Huang. Agent Transformer: On the Integration of Softmax and Linear Attention. Arxiv preprint.
- 3. Le Yang, Ziwei Zheng, **Yizeng Han**, Shiji Song, Gao Huang, Fan Li. DyFADet: Dynamic Feature Aggregation for Temporal Action Detection. *In submission*.
- 4. Le Yang, Ziwei Zheng, **Yizeng Han**, Shiji Song, Gao Huang, Fan Li. OStr-DARTS: Differentiable Neural Architecture Search based on Operation Strength. *In submission*.
- 5. Yulin Wang, Yang Yue, Rui Lu, **Yizeng Han**, Shiji Song, Gao Huang. EfficientTrain: Generalized Curriculum Learning for Training Visual Backbones. *In submission*.
- Jiangshan Wang, Yifan Pu, Yiru Wang, Yizeng Han, Jiayi Guo, Xiu Li, Gao Huang, GRA: Detecting Oriented Objects through Group-wise Rotating and Attention. In submission.

# \* 共同一作

# 受邀演讲

- 阿里达摩院	10/2022
- 华为	01/2022
- 机器之心	03/2021

#### 研究项目

- 面向资源受限场景的动态神经网络网络及其可解释性研究,清华大学	2020 - 2022
- 达芬奇芯片友好的神经网络架构设计, 清华大学	2020 - 2022
- 面向深度学习的自适应推理方法研究, 清华大学	2019 - 2020

# 学术兼职

## 智源社区动态神经网络研究小组发起人

## 以下学术会议或期刊的审稿人

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- International Journal of Computer Vision (IJCV)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- International Conference on Machine Learning (ICML)
- Conference on Neural Information Processing Systems (NeurIPS)
- International Conference on Learning Representations (ICLR)
- Conference on Computer Vision and Pattern Recognition (CVPR)
- International Conference on Computer Vision (ICCV)
- European Conference on Computer Vision (ECCV)
- Pattern Recognition (PR)
- International Conference on Image and Graphics (ICIG)