



ZHUOFAN XIA | 夏卓凡

Mobile: +86 135-1226-0137

xzf23@mails.tsinghua.edu.cn

[Personal Homepage](#)

EDUCATION

Ph.D. Control Science and Engineering Tsinghua University, advised by <i>Prof. Gao Huang</i> and <i>Prof. Shiji Song</i>	Aug. 2020 – 2026 (Expected) Beijing, China
B.Eng. Automation Tsinghua University	Aug. 2016 – June 2020 Beijing, China

PUBLICATIONS

*Equal Contribution. †Corresponding Author.

Accepted Papers

First & Co-first Authors:

Bridging the Divide: Reconsidering Softmax and Linear Attention Dongchen Han*, Yifan Pu*, Zhuofan Xia* , Yizeng Han, Xuran Pan, Xiu Li, Jiwen Lu, Shiji Song, Gao Huang †	NeurIPS 2024
Efficient Diffusion Transformer with Step-wise Dynamic Attention Mediators Yifan Pu*, Zhuofan Xia* , Jiayi Guo*, Dongchen Han, Qixiu Li, Duo Li, Yuhui Yuan, Ji Li, Yizeng Han, Shiji Song, Gao Huang †, Xiu Li †	ECCV 2024
GSVA: Generalized Segmentation via Multimodal Large Language Models Zhuofan Xia* , Dongchen Han*, Yizeng Han, Xuran Pan, Shiji Song, Gao Huang †	CVPR 2024
Budgeted Training for Vision Transformer Zhuofan Xia* , Xuran Pan*, Xuan Jin*, Yuan He, Hui Xue, Shiji Song, Gao Huang †	ICLR 2023
Vision Transformer with Deformable Attention Zhuofan Xia* , Xuran Pan*, Shiji Song, Li Erran Li, Gao Huang †	CVPR 2022 Best Paper Finalists, 0.4%
3D Object Detection with Pointformer Xuran Pan*, Zhuofan Xia* , Shiji Song, Li Erran Li, Gao Huang †	CVPR 2021

Other Papers:

Demystify Mamba in Vision: A Linear Attention Perspective Dongchen Han, Ziyi Wang, Zhuofan Xia , Yizeng Han, Yifan Pu, Chunjiang Ge, Jun Song, Shiji Song, Bo Zheng, Gao Huang †	NeurIPS 2024
Training an Open-Vocabulary Monocular 3D Detection Model without 3D Data Rui Huang, Henry Zheng, Yan Wang, Zhuofan Xia , Marco Pavone, Gao Huang †	NeurIPS 2024
Agent Attention: On the Integration of Softmax and Linear Attention Dongchen Han*, Tianzhu Ye*, Yizeng Han, Zhuofan Xia , Shiji Song, Gao Huang †	ECCV 2024
Slide-Transformer: Hierarchical Vision Transformer with Local Self-Attention Xuran Pan*, Tianzhu Ye*, Zhuofan Xia , Shiji Song, Gao Huang †	CVPR 2023
Adaptive Rotated Convolution for Rotated Object Detection Yifan Pu*, Yiru Wang*, Zhuofan Xia , Yizeng Han, Yulin Wang, Weihao Gan, Zidong Wang, Shiji Song, Gao Huang †	ICCV 2023

In Submission

- DAT++: Spatially Dynamic Vision Transformer with Deformable Attention** Preprint
Zhuofan Xia, Xuran Pan, Shiji Song, Li Erran Li, Gao Huang[†]
• Extended journal version of *Vision Transformer with Deformable Attention*.
- Generalized Activation via Multivariate Projection** Preprint
Jiayun Li, Yuxiao Cheng, Yiwen Lu, **Zhuofan Xia**, Yilin Mo[†], Gao Huang

HONORS AND AWARDS

- Friend of Tsinghua – Ubiquant Scholarship of Tsinghua University** Fall 2023
Comprehensive excellence
- Friend of Tsinghua – Hefei Talent Scholarship of Tsinghua University** Fall 2022
Comprehensive excellence
- Friend of Tsinghua – Samsung Scholarship of Tsinghua University** Fall 2021
Comprehensive excellence
- Friend of Tsinghua – Evergrand Scholarship of Tsinghua University** Fall 2019
Academic excellence
- Outstanding Social Work Scholarship of Tsinghua University** Fall 2019
Outstanding social work
- Friend of Tsinghua – ZhangRonghua Scholarship of Tsinghua University** Fall 2018
Academic excellence
- Outstanding Social Work Scholarship of Tsinghua University** Fall 2018
Outstanding social work
- Academic Excellence Scholarship of Tsinghua University** Fall 2017
Academic excellence

TEACHING ASSISTANT EXPERIENCE

- Modeling and Optimization of Complex Networked Systems** 80250463
Instructor: Prof. Shiji Song and Prof. Gao Huang Tsinghua University
• Nonlinear optimization algorithms and network optimization algorithms.
• Worked as TA in 2021–2024 Fall.

SKILLS

- **Languages:** Chinese (Native), English
- **Programming:** C/C++, C#, Python, MATLAB
- **Deep Learning Toolkits:** TensorFlow, PyTorch, Caffe
- **Document Creation:** Microsoft Office Suite, \LaTeX , Markdown