Zizheng Pan

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EDUCATION

Monash University

Ph.D. in Computer Science

Melbourne, Australia Jan 2021 – 2024

Email: zizheng.pan@monash.edu

The University of Adelaide

M.S. in Computer Science

Adelaide, Australia Jul 2018 - Jul 2020

Harbin Institute of Technology

B.E. in Software Engineering

Weihai, China Sep 2015 - Jun 2019

Research Interests

Deep Learning, Efficient and Scalable Vision, Model Compression, Vision Transformers.

PUBLICATIONS

(* denotes equal contribution)

• Stitchable Neural Networks,

Zizheng Pan, Jianfei Cai, Bohan Zhuang.

Conference on Computer Vision and Pattern Recognition (CVPR), 2023. (Highlight)

Dynamic Focus-aware Positional Queries for Semantic Segmentation,
Haoyu He, Jianfei Cai, <u>Zizheng Pan</u>, Jing Liu, Jing Zhang, Dacheng Tao, Bohan Zhuang.
Conference on Computer Vision and Pattern Recognition (CVPR), 2023

• Fast Vision Transformers with HiLo Attention.

Zizheng Pan, Jianfei Cai, Bohan Zhuang.

Conference on Neural Information Processing Systems (NeurIPS), 2022. (Spotlight)

• EcoFormer: Energy-Saving Attention with Linear Complexity.

Jing Liu*, **Zizheng Pan***, Haoyu He, Jianfei Cai, Bohan Zhuang.

Conference on Neural Information Processing Systems (NeurIPS), 2022. (Spotlight)

• An Efficient Spatio-Temporal Pyramid Transformer for Action Detection.

Yuetian Weng, **Zizheng Pan**, Mingfei Han, Xiaojun Chang, Bohan Zhuang.

In European Conference on Computer Vision (ECCV), 2022.

• Less is More: Pay Less Attention in Vision Transformers.

Zizheng Pan, Bohan Zhuang, Haoyu He, Jing Liu, Jianfei Cai.

In AAAI Conference on Artificial Intelligence (AAAI), 2022.

• Scalable Visual Transformers with Hierarchical Pooling.

Zizheng Pan, Bohan Zhuang, Jing Liu, Haoyu He, Jianfei Cai.

In International Conference on Computer Vision (ICCV), 2021.

• The Road to Know-Where: An Object-and-Room Informed Sequential BERT for Indoor Vision-Language Navigation.

Yuankai Qi, Zizheng Pan, Yicong Hong, Ming-Hsuan Yang, Anton van den Hengel, Qi Wu.

In International Conference on Computer Vision (ICCV), 2021.

• Object-and-Action Aware Model for Visual Language Navigation.

Yuankai Qi, **Zizheng Pan**, Shengping Zhang, Anton van den Hengel, Qi Wu.

In European Conference on Computer Vision (ECCV), 2020.

TECHNICAL REPORT

- A Survey on Efficient Training of Transformers , on arXiv. Bohan Zhuang, Jing Liu, **Zizheng Pan**, Haoyu He, Yuetian Weng, Chunhua Shen
- Mesa: A Memory-saving Training Framework for Transformers, on arXiv. **Zizheng Pan**, Peng Chen, Haoyu He, Jing Liu, Jianfei Cai, Bohan Zhuang.
- Pruning Self-attentions into Convolutional Layers in Single Path, on arXiv. Haoyu He, Jing Liu, **Zizheng Pan**, Jianfei Cai, Jing Zhang, Dacheng Tao, Bohan Zhuang.

SELECTED AWARDS

Monash Graduate Scholarship
Adelaide Summer Research Scholarship
Outstanding Graduate in Harbin Institute of Technology
Jun 2019

TEACHING EXPERIENCE

• FIT 5201 - Machine Learning, TA

Feb 2022 - Nov 2022

Professional Activities

• Conference Reviewer: CVPR 2022, ICCV 2021, ECCV 2022, NeurIPS 2022

SKILLS

• Language: English, Chinese

• Coding: Python, PyTorch, Git, CUDA