

EDUCATION

- **Monash University** Melbourne, Australia
Ph.D. in Computer Science Jan 2021 – 2024
- **The University of Adelaide** Adelaide, Australia
M.S. in Computer Science Jul 2018 - Jul 2020
- **Harbin Institute of Technology** Weihai, China
B.E. in Software Engineering Sep 2015 - Jun 2019

RESEARCH INTERESTS

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

PUBLICATIONS

(* denotes equal contribution)

- A Survey on Efficient Training of Transformers,
Bohan Zhuang, Jing Liu, **Zizheng Pan**, Haoyu He, Yuetian Weng, Chunhua Shen
International Joint Conference on Artificial Intelligence (**IJCAI**), 2023.
- 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, **Zizheng Pan**, 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

- 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

- | | |
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| • Google Travel and Conference Grants | Apr 2023 |
| • Monash Graduate Scholarship | Oct 2020 |
| • Adelaide Summer Research Scholarship | Apr 2019 |
| • Outstanding Graduate in Harbin Institute of Technology | Jun 2019 |

TEACHING EXPERIENCE

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|-----------------------------------|---------------------|
| • FIT 5201 - Machine Learning, TA | Feb 2022 - Nov 2022 |
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PROFESSIONAL ACTIVITIES

- **Conference Reviewer :** CVPR 2022/2023, ICCV 2021/2023, ECCV 2022, NeurIPS 2022/2023

SKILLS

- **Language:** English, Chinese
- **Coding:** Python, PyTorch, Git, CUDA