Zicheng Pan

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EDUCATION

Griffith University

Feb. 2022 – Present (expected graduation date: Feb. 2025)

Doctor of Philosophy

The University of Queensland (UQ)

Feb. 2017 – Dec. 2021

Bachelor of Engineering (Hons) / Master of Engineering in Electrical Engineering Field GPA 6.55 / 7 (First-Class Honours, awarded Dean's Commendation for Academic Excellence)

PROFESSIONAL EXPERIENCE

Jul. 2019 – Dec. 2019 The University of Queensland

Title: Casual Demonstrator

Responsibilities Assist students with coursework and deliver course content to students.

Oct. 2018 – Jan. 2019 Brisbane City Council

Title: Internship

Responsibilities: Design and implement an Android application to control remote

devices and manage data flow in the traffic network services team.

PROFESSIONAL SKILLS

• Python (PyTorch Deep Learning Toolkit)

• MATLAB, JAVA, C

• Git

- Grafana, Altium
- openHistorian
- Embedded System, Linux

RESEARCH EXPERIENCES

Aug. 2021 – Dec. 2023 Research Assistant at ARC Research Hub

School of Engineering and Built Environment

Griffith University

Responsibilities: The role provides research activities including data collection, data

analysis, deep learning modelling design, and reporting of ARC Research Hub projects. The projects include larvae detection and plant cultivars

identification. My responsibilities have included:

• Spearheaded comprehensive image data acquisition and built

robust datasets for model training and validation.

 Pioneered the development and optimization of advanced deep learning architectures, fine-tuning algorithms for superior performance in image-based classification tasks, including larvae

detection and plant cultivar identification.

• Co-drafted and published several conference papers.

Jul. 2023 – Nov. 2023 Research Assistant

Aug. 2022 – Oct. 2022 School of Information Technology and Electrical Engineering

The University of Queensland / University of Southern Queensland

Responsibilities: The project mainly focuses on investigating the stability of the electrical

power grid as well as detecting false data injection attacks within the power grids of the University of Queensland and America with various

loading conditions. My responsibilities have included:

- Built software tools to properly obtain, manage, and process the power grid data, facilitating comprehensive analysis.
- Develop machine learning and deep learning models to perform anomaly electrical signal detection as well as attack detection.
- Co-drafted several journal papers.

FEATURED PUBLICATIONS

- 9. [Pattern Recognition (under review)] Pan Zicheng, Xiaohan Yu, Yongsheng Gao. "Overcoming Learning Bias via Prototypical Feature Compensation for Source-Free Domain Adaptation."
- 8. [IEEE Transactions on Pattern Analysis and Machine Intelligence (under review)] Weichuan Zhang, Yali Zhao, Zicheng Pan, Yongsheng Gao, Changming Sun. "Feature Information Reharvesting in Convolutional Neural Networks for Few-shot Fine-grained Image Classification."
- 7. [Pattern Recognition (under review)] Pan Zicheng, Weichuan Zhang, Xiaohan Yu, Miaohua Zhang, Yongsheng Gao. "Pseudo-set Frequency Refinement for Fine-Grained Few-Shot Class-Incremental Learning."
- 6. [IEEE Transactions on Neural Networks and Learning Systems 2024] Zicheng Pan, Xiaohan Yu, Miaohua Zhang, Weichuan Zhang, Yongsheng Gao. "DyCR: A Dynamic Clustering and Recovering Network for Few-Shot Class-Incremental Learning."
- 5. **[IEEE Transactions on Industry Applications 2024]** Feifei Bai, Yi Cui, Ruifeng Yan, Tapan Kumar Saha, <u>Zicheng Pan</u>, Ge Zhang, Matthew Zillmann, David Dart. "Condition Monitoring of Power Network Assets Using PMU Measurements."
- 4. [IEEE Transactions on Neural Networks and Learning Systems 2024] Xiaohan Yu*, Zicheng Pan*, Yang Zhao, Yongsheng Gao. "Self-Supervised Lie Algebra Representation Learning via Optimal Canonical Metric."
- 3. **[WACV 2023]** Zicheng Pan, Xiaohan Yu, Miaohua Zhang, Yongsheng Gao. "SSFE-Net: Self-Supervised Feature Enhancement for Ultra-Fine-Grained Few-Shot Class Incremental Learning."
- 2. [DICTA 2021] Zicheng Pan, Xiaohan Yu, Miaohua Zhang, Yongsheng Gao. "Mask-Guided Feature Extraction and Augmentation for Ultra-Fine-Grained Visual Categorization."
- 1. **[IEEE Transactions on Smart Grid 2020]** Feifei Bai, Ruifeng Yan, Tapan Kumar Saha, Yi Cui, Zicheng Pan. "Extraction of Dynamic Frequency Response Characteristics and Modelling of Modern Air Conditioners."

HONOURS AND AWARDS

- 11. Serving as a reviewer for conferences and journal, e.g. CVPR; ACMMM; ICME; TNNLS.
- 10. Griffith University, "Innovation and Entrepreneurship Team of the Year (Rising Star)" 2023
- 9. Griffith University, "Griffith University International Postgraduate Research Scholarship" 2022
- 8. Griffith University, "Griffith University Postgraduate Research Scholarship" 2022
- 7. The University of Queensland, "UQ Winter Research Scholarship", Jul. 2021
- 6. The University of Queensland, "Dean's Commendation for Academic Excellence", 2020, 2021
- 5. The University of Queensland, "UQ Summer Research Scholarship", Feb. 2020
- 4. The University of Queensland, "UQ Innovation Workshop Scholarship", Jul. 2019
- 3. The University of Queensland, "UQ Student-Staff Partnership Scholarship", May. 2019
- 2. The University of Queensland, "UQ EAIT Ambassador", Nov. 2018
- 1. The University of Queensland, "UQ Winter Research Scholarship", Jul. 2018