Richard Cornelius Suwandi

Contact Information

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Research Interests

Open-ended intelligent systems capable of continuous learning, efficient knowledge acquisition from limited data, and generalization across an evolving range of tasks

Education

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) Sep 2023 - Present
Ph.D. in Computer and Information Engineering

- **Supervisor:** Prof. Feng Yin, Prof. Tsung-Hui Chang (IEEE Fellow)

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) Sep 2019 - May 2023
B.Sc. in Statistics (First-class honours)

Honors and Awards

2nd Prize Award, Doctoral Research and AI Conference, CUHK-Shenzhen	2025
IEEE Signal Processing Society Scholarship	2024
Shenzhen Universiade International Scholarship Foundation	2024
School of Science and Engineering Postgraduate Studentship, CUHK-Shenzhen	2023
Undergraduate Research Award, CUHK-Shenzhen	2022, 2023
School of Data Science Dean's List Award, CUHK-Shenzhen	2020, 2021, 2022, 2023
Guangdong Government Outstanding International Student Scholarship	2020, 2021
Full Tuition and Accommodation Scholarship, CUHK-Shenzhen	2019

Research Experience

Bayesian Learning for Signal Processing (BLSP) Group Jun 2021 - May 2023
Undergraduate Research Assistant
Assisted Prof. Feng Yin on a project involving Gaussian process (GP) for time series analysis:

- Designed a novel grid spectral mixture kernel for GP with multidimensional input
- Developed two distributed algorithms for kernel learning in GP regression
- Presented a paper accepted at FUSION 2022

Shenzhen Research Institute of Big Data (SRIBD) Jun 2020 - May 2021
Undergraduate Research Assistant
Assisted Prof. Tsung-Hui Chang on a project focused on federated unsupervised learning:

- Investigated federated matrix factorization for data clustering and recommender systems
- Co-authored a paper and a poster accepted at IEEE ICASSP 2021

Publications

R. C. Suwandi, Z. Lin, F. Yin, Z. Wang, S. Theodoridis, "Sparsity-Aware Distributed Learning for Gaussian Processes with Linear Multiple Kernel," IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2025. [Paper], [Code]

R. C. Suwandi, Z. Lin, Y. Sun, Z. Wang, L. Cheng, F. Yin, "Gaussian Process Regression with Grid Spectral Mixture Kernel: Distributed Learning for Multidimensional Data," 25th International Conference on Information Fusion (FUSION), 2022, pp. 1-8. [Paper], [Code], [Slides]

S. Wang, R. C. Suwandi, T. -H. Chang, "Demystifying Model Averaging for Communication-Efficient Federated Matrix Factorization," 46th IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2021, pp. 3680-3684. [Paper], [Poster]

TEACHING EXPERIENCE	*Teaching Assistant*, MAT2040: Linear Algebra, CUHK-Shenzhen	Spring 2025
	Teaching Assistant, CIE6007: Machine Learning, CUHK-Shenzhen	Fall 2024
	Teaching Assistant, MAT2040: Linear Algebra, CUHK-Shenzhen	Spring 2024
	Teaching Assistant, MAT2040: Linear Algebra, CUHK-Shenzhen	Fall 2023
PROFESSIONAL SERVICES AND AFFILIATIONS	*Reviewer*, IEEE Transactions on Neural Networks and Learning Systems	2025 - Present
	Reviewer, International Conference on Learning Representations	2025 - Present
	Reviewer, IEEE Transactions on Signal Processing	2024 - Present
	Member, IEEE Young Professionals	2024 - Present
	Member, IEEE Signal Processing Society	2024 - Present
	Graduate Student Member, IEEE	2024 - Present
	Member, IEEE Student Branch, CUHK-Shenzhen	2023 - Present