

Richard Cornelius Suwandi

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Research Interests

Sample-efficient black-box optimization, probabilistic modeling, open-ended discovery for science & engineering

Education

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) *Sep 2023 – Present*
PhD in Computer and Information Engineering

- **Supervisors:** Prof. Feng Yin & Prof. Tsung-Hui Chang (IEEE Fellow)

The Chinese University of Hong Kong, Shenzhen (CUHK-Shenzhen) *Sep 2019 – May 2023*
BSc in Statistics (Data Science Stream), First-Class Honours

Research Experience

Dria *Sep 2025 – Present*
Research Intern

- Working on evolutionary coding agents for algorithm discovery and codebase optimization

Bayesian Learning for Signal Processing (BLSP) Group *Jun 2021 – May 2023*
Undergraduate Research Assistant (Supervised by Prof. Feng Yin)

- 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 2021 – May 2023*
Undergraduate Research Assistant (Supervised by Prof. Tsung-Hui Chang)

- 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, F. Yin, J. Wang, R. Li, T.-H. Chang, S. Theodoridis, “**Adaptive Kernel Design for Bayesian Optimization Is a Piece of CAKE with LLMs**,” *39th Conference on Neural Information Processing Systems (NeurIPS)*, 2025. [Paper](#) [Code](#)

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. [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. [Paper](#) [Poster](#)

Honors & Awards

2nd Prize Award, Doctoral Research and AI Conference, CUHK-Shenzhen	2025
IEEE Signal Processing Society Scholarship	2024, 2025
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
Bronze Medal, Asia International Mathematical Olympiad (AIMO)	2018

Teaching Experience

<i>Teaching Assistant</i> , CIE6007 Machine Learning, CUHK-Shenzhen	Fall 2025
<i>Teaching Assistant</i> , MAT2040 Linear Algebra, CUHK-Shenzhen	Spring 2025
<i>Teaching Assistant</i> , CIE6007 Machine Learning, CUHK-Shenzhen	Fall 2024
<i>Teaching Assistant</i> , MAT2040 Linear Algebra, CUHK-Shenzhen	Spring 2024
<i>Teaching Assistant</i> , MAT2040 Linear Algebra, CUHK-Shenzhen	Fall 2023

Organizational Experience

<i>Co-organizer</i> , AI4Science Community, alphaXiv	2025 – Present
<i>Student Ambassador</i> , CUHK-Shenzhen	2024 – Present
<i>Graduate Student Member</i> , IEEE	2024 – Present
<i>Member</i> , IEEE Young Professionals	2024 – Present
<i>Member</i> , IEEE Signal Processing Society	2024 – Present
<i>Member</i> , IEEE Student Branch, CUHK-Shenzhen	2023 – Present

Services

<i>Journal Reviewer</i> , IEEE Transactions on Signal Processing (TSP)
<i>Journal Reviewer</i> , IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
<i>Conference Reviewer</i> , Neural Information Processing Systems (NeurIPS)
<i>Conference Reviewer</i> , International Conference on Machine Learning (ICML)
<i>Conference Reviewer</i> , International Conference on Learning Representations (ICLR)
<i>Conference Reviewer</i> , IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)