Richard Cornelius Suwandi

CONTACT INFORMATION

2001 Longxiang Boulevard
Longgang, Shenzhen

richardsuwandi@link.cuhk.edu.cn
richardcsuwandi.github.io

EDUCATION

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

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

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

HONORS AND AWARDS

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, CUHK-Shenzhen
Undergraduate research assistant — Jun 2021 - May 2023
Assisted Prof. Feng Yin with Gaussian process for time series analysis project:

- Designed a novel grid spectral mixture kernel for Gaussian process with multidimensional input
- Developed two distributed learning algorithms for Gaussian process regression based on the successive convex approximation (SCA) and alternating direction method of multipliers (ADMM) algorithm
- Presented a paper that was accepted to the 25th International Conference on Information Fusion (FUSION) 2022

Shenzhen Research Institute of Big Data (SRIBD), Shenzhen
Undergraduate research assistant — Jun 2020 - May 2021
Assisted Prof. Tsung-Hui Chang with federated unsupervised learning project:

- Investigated the federated matrix factorization (MF) problem for data clustering and recommender systems
- Combined the alternating minimization and model averaging (MA) technique to solve the federated MF problem
- Co-authored a paper that was accepted to the 46th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2021

PUBLICATIONS

R. C. Suwandi, Z. Lin, Y. Sun, Z. Wang, L. Cheng and 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]

S. Wang, R. C. Suwandi and 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 2024
Teaching Assistant, MAT2040: Linear Algebra, CUHK-Shenzhen — Fall 2023