Hoang-Son Nguyen

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Research Interests

Deep representation learning methods guided by identifiability and robustness principle, to improve generalizability, interpretability, and steerability of deep learning systems (such as large language models)

Education

Oregon State University Oct. 2024 – Mar. 2026
M.S. in Artificial Intelligence *United States*

The Chinese University of Hong Kong (CUHK) Sep. 2019 – Mar. 2024
B.Eng. in Artificial Intelligence, First Class Honours *Hong Kong*

Work Experience

Graduate Research Assistant Oct. 2024 – Now
School of Electrical Engineering & Computer Science *United States*

- Supervisor: Dr. Xiao Fu
- Topics: Deep Representation Learning, Matrix Factorization

Research Assistant Apr. 2024 – Aug. 2024
Dept. of Systems Engineering & Engineering Management, CUHK *Hong Kong*

- Supervisor: Dr. Hoi-To Wai
- Topics: Graph Signal Processing, Graph Learning

Preprints & Publications

- **N.**, Hoi-To Wai "Robustness of Graph Learning Algorithms to Partially Observed Smooth Graph Signals", Preprint in preparation, 2025.
- **N.** and Hoi-To Wai, "On Detecting Low-Pass Graph Signals under Partial Observations," IEEE 13rd Sensor Array and Multichannel Signal Processing Workshop (SAM), 2024.
- **N.**, Yiran He and Hoi-To Wai, "On the Stability of Low Pass Graph Filter with a Large Number of Edge Rewires," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022.

Honors & Awards (Selected)

Best Student Paper Award at IEEE SAM 2024
For the best student works at IEEE Sensor Array and Multichannel Signal Processing Workshop

Professor Charles K. Kao Research Scholarship 2023
For outstanding achievements in undergraduate research

University Admission Scholarship 2019
Full-ride scholarship for the entire undergraduate study

Miscellaneous

Programming: Python (PyTorch, PySpark), C/C++, MATLAB, Linux
Reviewer: Causality and Large Models @ NeuRIPS (2024), IEEE ICASSP (2025), IEEE TSP (2025)