




Ngoc Hung Nguyen

G301, VinUniversity, Hanoi 100000, Vietnam | nnhungbk@gmail.com | +84-982-733242
 [ngoc-hung-nguyen](#) |  [ngochungnguyenlg](#)  [ngochungnguyenlg.github.io/nnhung](#)





RESEARCH INTEREST

Computing: Cloud/edge computing, IoT, deadline-aware task scheduling
Intelligence: Applied AI/ML for networking (deep learning, deep reinforcement/reinforcement learning)
Algorithms: Greedy, graph-based algorithms, evolutionary computing.

EDUCATION

- Hanyang University** 09-2021 - 02-2024
M.Sc. in Electrical and Electronic Engineering
Ansan, Korea
- Hanoi University of Science and Technology** 09-2013 - 08-2018
Bachelor of Engineering
Hanoi, Vietnam

WORK AND ACADEMIC EXPERIENCE

- VinUniversity**  03-2024 - Present
Research Assistant
Hanoi, Vietnam
 - Research on Intelligent Transportation Systems using metaheuristics and Deep Reinforcement Learning techniques.
 - Exploring the application of AI and IoT in aquaculture.
- FPT Software**  01-2024 - 12-2024
Senior AI Engineer
Hanoi, Vietnam
 - Applied quantization methods to classification and detection models, including Resnet, SSD-Resnet, and DERT.
 - Developed quantized pipelines incorporating QAT, PTQ, and TVM_CPU frameworks.
 - Conducted testing and performance analysis of AI models.
- Hanyang University**  09-2021 - 02-2024
Research Assistant
Ansan, Korea
 - Research focused on Wireless Communication and Mobile Edge Computing.
 - Applied Deep Learning and Reinforcement Learning techniques to solve optimization problems.
 - Developed solutions using greedy algorithms for optimization.
- LG Electronics**  10-2018 - 07-2021
Senior Embedded Engineer
Hanoi, Vietnam
 - Developed Wi-Fi middleware as part of the Wi-Fi core framework.
 - Created SPI middleware for the SPI-Fi core framework.
 - Performed unit testing using Google Test framework.
 - Developed a tool for generating unit test code (C/C++ using Qt Creator on Windows OS).
 - Researched methods for evaluating camera sharpness based on different regions, leading to the development of test software for camera performance.
 - Worked on autofocus and low contrast brightness improvement features.
 - Developed various software tools for testing and performance analysis.

HONORS AND AWARDS

- Third-award - Student Research Prize** Hanoi
Hanoi University of Science and Technology 2017-2018

SKILLS

- Programming Languages:** Python, C++/C, Cuda-C++, MATLAB
- Data Science & Machine Learning:** Pytorch, TensorFlow, Pandas, Numpy
- Technique:** Mathematical Modeling, Numerical Methods, Optimization, Applied AI/ML (e.g., RL/DRL)
- Languages:** Vietnamese (mother tongue), English (fluent)

ACADEMIC SERVICES

- Journal reviewer:** IEEE Internet of Things, IEEE Communication letter, and Computer Networks

Research profiles:

- Google Scholar: <https://scholar.google.com/citations?user=uOr3eosAAAAJ&hl=vi&oi=ao>
- ORCID: <https://orcid.org/0009-0007-7363-5014>
- ResearchGate: <https://www.researchgate.net/profile/Nguyen-Hung-120>

- [S.1] Ngoc Hung Nguyen, Nguyen Van Thieu, Senura H. Wanasekara, Van-Dinh Nguyen, Quang-Trung Luu, Nguyen Cong Luong, and Anh Tuan Nguyen, “**Oranits: Autonomous Control and Task Allocation in ITS Integrating MEC and Open RAN using Metaheuristic and Deep Reinforcement Learning**,” submitted to *IEEE Transaction on Intelligent Transportation Systems*, 2025 (in review).
- [S.2] Tran Cong Dao, Nguyen Cong Luong, Ngoc Hung Nguyen, Xingwang Li, Dusit Niyato, and Dong In Kim (2024). **Multi-Hop Routing for IoT-Based Digital Twin: Novel Metaheuristic Approaches**. In *IEEE Internet of Things Journal*. Publisher IEEE. Status: Under-reviewing.
- [J.1] Ngoc Hung Nguyen; Van-Dinh Nguyen; Anh Tuan Nguyen; Nguyen Van Thieu; Hoang Nam Nguyen; Symeon Chatzinotas (2024). **Deadline-Aware Joint Task Scheduling and Offloading in Mobile-Edge Computing Systems**. In *IEEE Internet of Things Journal*, pp. 33282 - 33295. Publisher IEEE. Date 07-10-2024. DOI: 10.1109/JIOT.2024.3425854
- [J.2] Nguyen Van Thieu, Ngoc Hung Nguyen, and Ali Asghar Heidari (2024). **Feature selection using metaheuristics made easy: Open source MAFESE library in Python**. In *Future Generation Computer Systems*, pp. 340-358. DOI: <https://doi.org/10.1016/j.future.2024.06.006>
- [J.3] Nguyen Van Thieu, Ngoc Hung Nguyen, Mohsen Sherif, Ahmed El-Shafie, and Ali Najah Ahmed (2024). **Integrated metaheuristic algorithms with extreme learning machine models for river streamflow prediction**. In *Scientific Reports*, Publisher Nature, pp. 340-358. DOI: <https://doi.org/10.1016/j.future.2024.06.006>
- [T.1] Ngoc Hung Nguyen (2024). **Offloading under Hardline in Mobile Edge Computing**.
- [P.1] Ngoc Hung Nguyen, Sang-Woon Jeon, and Kangyu Gao. (2023). **Job Scheduling with Deadline Constraints**. Patent Office, Patent No. 10-2023-0035648. Registration Date: 20/03/2023, Grant Date: Under-reviewing, Publication Date: Under-reviewing.
- [C.1] ASenura Hansaja Wanasekara, Han Huy Dung, Ngoc Hung Nguyen and Van-Dinh Nguyen. (2024). **Lossy Compression of Multi-channel EEG and PPG Signals based on Golomb-Rice Coding with Parameter Estimation**. *ATC 2024*, Vol. XX, Issue X, pp. pending. DOI: Pending

REFERENCES

Dr. Van-Dinh Nguyen, Assist. Prof.
VinUniversity
E-mail: dinh.nv2@vinuni.edu.vn
Mobile: +84-388961484
Research Leader

Dr. Minh-Dinh Bui, Assoc. Prof.
Hanoi University of Science and Technology
E-mail: dinh.buiminh@hust.edu.vn
Mobile: +84-986397968
Under-graduate research advisor