

Education

Northeastern University <i>PhD, Electrical Engineering</i>	Boston, MS, US <i>Jan 2025 – Now</i>
Hanoi University of Science and Technology (HUST) <i>BS, Electrical Engineering</i>	Hanoi, Vietnam <i>Sep 2018 – Sep 2023</i>

Research Experience

MENTIS Laboratory, Northeastern University <i>Ph.D. Student</i>	Jan 2025 – Now <i>Boston, MA, USA</i>
AI/ML in Next-generation Multi-agent Control Systems: Develop a scalable and low-latency framework for multi-agent systems that minimizes resource usage (<i>e.g.</i> , computing, energy, and memory), enabling reliable operation in constrained environments.	
ICC Laboratory, VinUniversity <i>Research Assistant</i>	July 2023 – Dec 2024 <i>Hanoi, Vietnam</i>

WiFi-enabled Human Pose Estimation: Develop an efficient DNN model using WiFi signals for human pose estimation, achieving state-of-the-art accuracy with minimal computational cost.

AIoT laboratory, Phenikaa University
Research Assistant

DL-based Signal Detector for Communication Systems: Develop a DNN-based signal detector for NOMA systems, achieving near-optimal performance compared to the existing methods with low complexity.

Industry Experience

Bosch Global Software Technologies Co., Ltd (BGSV) <i>AI Intern - Global Talent Internship Program</i>	Aug 2022 – Feb 2023 <i>Hanoi, Vietnam</i>
Object detection and object tracking in front of the vehicle using front view camera: Develop a DL model for real-time object detection and tracking using a vehicle's front-view camera.	

Selected Publications

- **Toan Gian**, Tran Trung Dung, Francesco Restuccia, Viet Quoc Pham, Van-Dinh Nguyen. **TinySense: Effective CSI Compression for Scalable and Accurate Wi-Fi Sensing**. *IEEE International Conference on Pervasive Computing and Communications (PerCom) 2026*. **(A*, Accepted Rate: 15%)** [Pdf] [Code]
- **Toan Gian**, Mohammad Abdi, Francesco Restuccia. **SDE-HARL: Scalable Distributed Policy Execution for Heterogeneous-Agent Reinforcement Learning**. *Association for the Advancement of Artificial Intelligence (AAAI) 2026*. **(A*, Accepted Rate: 17%)** [Pdf] [Code]
- **Toan Gian**, Tien Lai, Thien Van Luong, Kok-Seng Wong, and Van-Dinh Nguyen. **HPE-Li: WiFi-enabled Lightweight Dual Selective Kernel Convolution for Human Pose Estimation**. *European Conference on Computer Vision (ECCV) 2024*. **(A*, Accepted Rate: 21%)** [Pdf] [Code]

Honors and Awards

Fully Funded Ph.D. Scholarship. <i>Northeastern University</i>	2025-2029 <i>Boston, MA, USA</i>
ECCV Travel Grant Award 2024. <i>European Conference on Computer Vision 2024</i>	Sep 2024 <i>Milan, Italia</i>
Best School of Electrical and Electronic Engineering Thesis Award. <i>Hanoi University of Science and Technology; Grade: 100/100</i>	Aug 2023 <i>Hanoi, Vietnam</i>
Global Scholarship Talent Internship Program. <i>Bosch Global Software Technologies</i>	Aug 2022 <i>Hanoi, Vietnam</i>

SKILLS

Languages: Vietnamese (native), English (Toeic: 765/990, IELTS: 6.5, Duolingo English Test (DET): 105)

Frameworks: Pytorch, Tensorflow/Keras.

Operator systems: Linux, Window.

REFEREES

Asst. Prof. Francesco Restuccia

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