

## Education

<b>Graduated Student in Electrical Engineering</b> <i>Northeastern University</i> GPA: <b>3.5/4.0</b>	<b>Jan 2025 – Now</b> <i>Boston, MS, US</i>
<b>Bachelor in Electrical Engineering</b> <i>Hanoi University of Science and Technology (HUST)</i> • Best thesis award: “Deep Learning Detector for Downlink IM-NOMA System” Degree classification: Good GPA: <b>8.0/10</b>	<b>Sep 2018 – Sep 2023</b> <i>Hanoi, Vietnam</i>

## Research Experience

<b>MENTIS Laboratory, Northeastern University</b> <i>Ph.D. Student</i>	<b>Jan 2025 – Now</b> <i>Boston, MA, USA</i>
<b>AI/ML in Next-generation Multi-agent Control Systems:</b> 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.	
<b>ICC Laboratory, VinUniversity</b> <i>Research Assistant</i>	<b>July 2023 – Dec 2024</b> <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

<b>Bosch Global Software Technologies Co., Ltd (BGSV)</b> <i>AI Intern - Global Talent Internship Program</i>	<b>Aug 2022 – Feb 2023</b> <i>Hanoi, Vietnam</i>
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**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

### Journal Papers:

- **Toan Gian**, Dung Trung Tran, Van-Dinh Nguyen. **Multi-Modal Human Pose Estimation: A Wi-Fi–Driven Approach with Adaptive Kernel Selection.** *IEEE Transactions on Artificial Intelligence*. **(Q1, IF = 6.4)**
- Xuan Hoang Nguyen, Van-Dinh Nguyen, Quang-Trung Luu, **Toan Gian**, and Oh-Soon Shin. **Robust WiFi Sensing-based Human Pose Estimation Using Denoising Autoencoder and CNN with Dynamic Subcarrier Attention.** *The IEEE Internet of Things Journal*. **(Q1, IF = 8.9)**
- **Toan Gian**, Ngoc-Hung Pham, Van-Cuong Pham, Tien-Hoa Nguyen, Trung Tan Nguyen, and Thien Van Luong. **Deep Learning Detector for Downlink IM-NOMA.** *The Journal of Mobile Communication, Computation and Information (Wireless Networks)*. **(Q2, IF = 2.1)** [Code]

### Conference Papers:

- **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%)** [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%)** [Code]

## Honors and Awards

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

## SKILLS

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

**Frameworks:** Pytorch, Tensorflow/Keras.

**Operator systems:** Linux, Window.

## REFEREES

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<b>Asst. Prof. Francesco Restuccia</b>	<b>Boston, MA, US</b>
<i>Northeastern University</i>	
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•  <a href="#">Van Dinh Nguyen</a>	