

Quang Nguyen

Hanoi, Vietnam | quangnv2202@gmail.com | ZQuang2202.github.io | [Linkedin](#) | github.com/ZQuang2202

Education

Hanoi University of Science and Technology Sep 2019 – Sep 2023

BS in Control Engineering and Automation (Talent Program)

- **GPA: 9.53/10.0 (3.81/4.0)**. Ranking: 4/1424 Cohort (Rank 1 in Talent Program)
- Thesis: Deep learning based approach for Bearing Faults Diagnosis. Grade: 10/10. Advisor: **Prof. Truong Pham**

Vinh Phuc High School for Gifted Students Sep 2015 – Sep 2019

Gifted class in Physics

Experience

Senior AI Engineer, VinDynamics Humanoid Robot Research – Hanoi, Vietnam Dec 2025 – Present

- Computer Vision and Manipulation for Humanoid Robot. Advisor: **Prof. Anh Nguyen**.
- Designed and implemented humanoid robot perception and manipulation models, focusing on language-driven grasp detection, vision–language–action integration, and dexterous hand manipulation for household interaction tasks (e.g., door opening).

AI Research Resident, FPT Software AI Center – Hanoi, Vietnam Jul 2024 – Nov 2025

- AI for Robotics and Computer Vision. Advisor: **Prof. Anh Nguyen**.
- Research topics: Multimodal Robot Learning, Multimodal Human Motion Learning, LLM-based Multi-Agent System, Humanoid Robot, Seismic Imaging.

AI Engineer, VinBigdata Joint Stock Company – Hanoi, Vietnam Jun 2022 – Jun 2024

- Automatic Speech Recognition Team.
- Designed, trained, and served automatic speech recognition (ASR) and speaker adaptation models, supporting real-time streaming inference for the ViVi virtual assistant in smart car systems.

Research Assistant, IPSAL Lab, HUST – Hanoi, Vietnam Jan 2022 – Sep 2023

- Computer Vision and Signal Processing. Advisor: **Prof. Truong Pham**.
- Research topics: Deep learning for Bearing Faults Diagnosis, Few-shot Learning, Medical Image.

Honors and Awards

- **Gold Medal**, Competition for excellent students in the Northern Delta region of Vietnam, 2017. [Link](#)
- **Second Prize**, Vietnam National Physics Olympiad, 2018. [Link](#)
- **Second Prize**, Vietnam National Physics Olympiad, 2019. [Link](#)
- **Scholarship for Excellent Students**, Hanoi University of Science and Technology, 2019. [Link](#)
- **Scholarship for Excellent Students**, Hanoi University of Science and Technology, 2020. [Link](#)
- **Scholarship for Excellent Students**, Hanoi University of Science and Technology, 2021. [Link](#)
- **POSCO TJ Park Scholarship**, Hanoi University of Science and Technology, 2021. [Link](#)
- **Best Thesis Award**, Hanoi University of Science and Technology, 2023. [Link](#)

Skills

Programming: Python, C/C++, Java, Javascript, SQL, HTML, CSS, Linux, MATLAB, BASH, Triton

AI: Robotics, Embodied AI, Generative Models, 2&3D Computer Vision, Human Motion Learning, 3D Human Motion, Multimodal Learning, Large Language Models, Multi-Agent Systems

Frameworks: PyTorch, TensorFlow, Keras, Jax, Pandas, NumPy, Lhotse, Icefall, Onnx

Tools: Docker, Google Cloud, Jupyter Notebook/Lab, Git, Blender, NVIDIA Triton Inference Server

Languages: English, Vietnamese

Publications

Egomusic-driven human dance motion estimation with Skeleton Mamba. [Link](#)

Quang Nguyen, Nhat Le, Baoru Huang, Minh Nhat Vu, Chengcheng Tang, Van Nguyen, Ngan Le, Thieu Vo, Anh Nguyen
International Conference on Computer Vision (ICCV), 2025.

GraspMAS: Zero-Shot Language-driven Grasp Detection with Multi-Agent System. [Link](#)

Quang Nguyen, Tri Le, Huy Nguyen, Thieu Vo, Tung D. Ta, Baoru Huang, Minh Nhat Vu, Anh Nguyen
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2025.

Human Motion Learning with Temporally Conditional Mamba. [Link](#)

Quang Nguyen, Tri Le, Minh Nhat Vu, Ngan Le, Thieu Vo, Anh Nguyen
ACM SIGGRAPH ASIA, 2025.

RoboDesign1M: A Large-scale Dataset for Robot Design Understanding. [Link](#)

Tri Le, Toan Nguyen, Quang Tran, **Quang Nguyen**, Baoru Huang, Hoan Nguyen, Minh Nhat Vu, Tung D. Ta, Anh Nguyen
arXiv preprint arXiv:2503.06796, 2025.

Nonlinear RISE based Integral Reinforcement Learning Algorithms for Perturbed Bilateral Teleoperators with Variable Time Delay. [Link](#)

Phuong Nam Dao, **Quang Nguyen**, Hoang Anh Nguyen Duc
Neurocomputing, 2024.

Multiple Local-Global Correlation-Based Deep Neural Network with Selective Kernel Attention for Bearing Fault Diagnosis. [Link](#)

Quang Nguyen, Manh-Hung Vu, Thi-Thao Tran, Van-Truong Pham, Men-Tzung Lo
Cognitive Computation, 2024

ConvMixerformer-Unet: A New Approach for Medical Image Segmentation based on ConvMixer and Transformer. [Link](#)

Quang Nguyen, Quang-Huy Nguyen, Thi-Thao Tran
IEEE International Conference on Control, Automation and Information Sciences (ICCAIS), 2023.

A Deep Learning Approach based on MLP-Mixer Models for Bearing Fault Diagnosis. [Link](#)

Quang Nguyen, Manh-Hung Vu, Van-Truong Pham, Thi-Thao Tran
IEEE International Conference on System Science and Engineering (ICSSE), 2023.

References

Prof. Anh Nguyen

University of Liverpool
anh.nguyen@liverpool.ac.uk

Prof. Truong Pham

Hanoi University of Science and Technology
truong.phamvan@hust.edu.vn