

Quang Nhat Nguyen

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Languages: Vietnamese (native), English (proficient – IELTS 8.0),
Japanese (JLPT N2)



Affiliated Research Group

April 2020 – Present

Takeda Laboratory

Driving Behaviour and Perception Research Group

Department of Intelligent Systems, Graduate School of Informatics, Nagoya University

Current Research Topic

Material classification from multispectral and multimodal perception data: A novel approach for semantic segmentation and photorealistic LiDAR sensor simulation

Research interests: Perceptive intelligence of autonomous robots and vehicles, Intelligent systems, Data science, Computer vision, Artificial Intelligence, Digital twin, 3D mapping and reconstruction, Sensors fusion.

Professional Experience

June 2023 – Present

Research and Development Engineer at MapIV, inc. (a group member of TierIV, inc.)

November 2021 – March 2022, April 2023 – Present

Research Assistant at JARI (Japan Automobile Research Institute)

September 2022

Research Intern at RIKEN Centre for Computational Science (R-CCS)

In participation to the High-Performance Computing (HPC) Computational Science Research Internship

April 2022 – March 2023

Research Assistant at NEDO (New Energy and Industrial Technology Development Organisation)

Education

October 2021 – September 2023 (expected)

M.E. in Electrical Engineering

Nagoya University, Japan

October 2017 – September 2021

B.E. in Electrical Engineering, Electronics, and Information Engineering

Nagoya University, Japan, GPA: 4.07, Valedictorian

August 2014 – May 2017

High School Diploma with specialisation in Mathematics

Le Quy Don High School for Gifted Students, Da Nang City, Vietnam

Publications

Universal Calibration Target for Joint Calibration of LiDAR sensors, Thermal Cameras, and RGB cameras

Quang Nhat Nguyen, Khanh Bao Tran, Alexander Carballo, and Kazuya Takeda

IEEE International Conference on Intelligent Transportation Systems (ITSC) (submitted), September 2023

Physics-based LiDAR waveform simulation method for realism improvement of driving simulators

Quang Nhat Nguyen, Alexander Carballo, and Kazuya Takeda

International Symposium on Future Active Safety Technology toward zero-traffic-accident (FAST-zero), September 2021

On radial Schrödinger operators with a Coulomb potential: general boundary conditions

Jan Dereziński, Jérémy Faupin, Quang Nhat Nguyen, and Serge Richard

Advances in Operator Theory 5, pp. 1132 – 1192, July 2020

DOI: [10.1007/s43036-020-00082-6](https://doi.org/10.1007/s43036-020-00082-6)

Grants / Scholarships

October 2021 – Present

Japan Government's Scholar

Recipient of MEXT Scholarship as a graduate student, awarded by the Ministry of Education, Culture, Sports, Science and Technology of Japan

October 2017 – September 2021

Japan Government's Scholar

Recipient of MEXT Scholarship as an undergraduate student, awarded by the Ministry of Education, Culture, Sports, Science and Technology of Japan

Honours / Awards

Vingroup Science and Technology Scholarship Nomination

August 2022, nominated by Vingroup.

Outstanding Presentation Award

July 2022, awarded by Nagoya University.

Valedictorian of Nagoya University School of Engineering

September 2021, honoured by Nagoya University.

First Prize, Municipal Mathematics Olympiad

2017, awarded by the Department of Education of the Municipal Government of Da Nang City, Vietnam.

Third prize, Municipal Robotics Competition *ROBODNIC*

2017, awarded by the Association of the Science and Engineering Organisations in Da Nang City, Vietnam.

Second Prize, National Computer Science Competition

2012, awarded by the Ministry of Education of Vietnam.

Skills

Programming

Data science and **AI implementation** in Python, **High performance** computing, **Cloud-based** and **containerised** application development, **Graphics engine** (Unreal Engine) programming

Autonomous driving systems development, and others

Autonomous driving simulators (CARLA, SVL, Autoware), **Robotics perception** programming (ROS, SLAM, sensors fusion), **Electronics circuit** design and implementation, **3D CAD**

Licenses / Certificates

Quantum Computing

IBM Quantum Challenge Certificate of Achievement

Issued by **IBM**, credential ID: https://www.credly.com/badges/918c0976-1f83-4f02-9b88-a5f5afd02e87/public_url

Machine Learning

Machine Learning Specialisation

Issued by **Stanford University**, credential ID: <https://coursera.org/verify/specialization/JV2NK7M6HMSN>

Cloud-based Development

Amazon Web Services Specialisation: Modern Application Development with Python on AWS

Issued by **Amazon Web Services**, credential ID: <https://coursera.org/verify/specialization/YWFXB8CS6DTJ>

Teaching Experience

10/2018 – 2/2021

Tutor for the following courses at Nagoya University:

Mathematics for Machine Learning (Autumn 2020)

Graph Theory (Spring 2020)

Calculus I (Autumn 2019)

Differential Geometry (Autumn 2018)