# **Quang Nhat Nguyen**

Department of Electrical Engineering Graduate School of Engineering, Nagoya University

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

Japanese (fluent – JLPT N2)



# **Affiliated Research Group**

April 2020 - Present

#### **Takeda Laboratory**

Driving Behaviour and Automotive Perception Research Group Department of Intelligent Systems, Graduate School of Informatics, Nagoya University

## **Professional Experience**

June 2023 - Present

**Research and Development Engineer** (part-time) at the Sensing and Perception Team at Map IV, Inc. (a group member of Tier IV, 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, Data Assimilation Research Group

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

#### Skills

Programming

Deep learning implementation in Python TensorFlow

**Graphics** (Open3D, OpenCV) and **Graphics engine** (Unreal Engine) programming **Cloud-based** (AWS) and **containerised application** (Docker) development

Autonomous driving systems development, and others

Autonomous driving simulators (CARLA, SVL, Autoware)

Robotics perception programming (ROS, C++, MATLAB, sensors calibration, 3D digital twin)

#### **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

# **Honours / Awards**

### Japan Government's Graduate Scholarship

10.2021 - Present, awarded by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT)

#### **Outstanding Presentation Award**

7. 2022, awarded by Nagoya University.

#### Valedictorian of Nagoya University School of Engineering

9. 2021, honoured by Nagoya University.

#### Japan Government's Undergraduate Scholarship

10.2017 - 9.2021, awarded by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT)

# **Licenses / Certificates**

**Quantum Computing** 

#### IBM Quantum Challenge Certificate of Achievement

Issued by IBM, credential ID: https://www.credlv.com/badges/918c0976-1f83-4f02-9b88-a5f5afd02e87/public\_url

Machine Learning

#### **Machine Learning Specialisation**

 $Is sued by \textbf{Stanford University}, credential ID: \underline{https://coursera.org/verify/specialization/JV2NK7M6HMSN} \\$ 

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)