

# **DINH-CUONG HOANG**

Nationality: Vietnamese

Gender: Male

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<u>LinkedIn</u> <u>ResearchGate</u> <u>Google Scholar</u>

Academic Career:	
Dec 2021 – Now  Lecturer & Researcher at FPT University (Full Time)	<b>Teaching courses:</b> Programming Fundamentals (C Language); Object Oriented Programming (Java); Data Structures and Algorithms; Digital Image Processing; Advanced Computer Vision; Programming for Robotics; Robotics: Perception; Introduction of Deep Learning.
	<b>Research Areas:</b> Computer vision, deep learning, robotics.
Jan 2018 – Dec 2021	Thesis: Vision-based Perception For Autonomous Robotic Manipulation. web PDF
Ph.D in Computer Science, Örebro University, Sweden.	Research interests: My research interests lie at the intersection of computer vision, robotics, and machine
<u>website</u>	learning. I am particularly interested in topics involving
Centre for Applied Autonomous	autonomy for robots, with a focus on perception algorithms.
Sensor Systems ( <u>AASS</u> ).	ILIAD Project: a key member of the EU-funded research project Iliad. website code video video
2016 – 1, 2017	<b>Project 1</b> : Automated 3D pick & place and key dimension inspection on randomly stacked workpieces. video video
Research Assistant at National Taiwan University (NTU)	<b>Project 2</b> : 3D surface reconstruction and automated robotic inspection system. <u>video</u>
2014 – 2015	Master of Science in Automation Technology from National Taipei University of Technology (NTUT).
	Thesis: Multi-View 3-D surface digitization using Automated robot scanning and image registration. video video
2009 – 2014	5-year Engineering Program, Control and Automation Engineering, Hanoi University of Science and Technology.

## **Research Skills:**

- Practical experience in C/C++, python , ROS, Gazebo.
- Strong familiarity with 2D image and 3D point cloud processing algorithms.
- Research experience in deep learning, familiarity with Pytorch.
- Solid theoretical background of the basic concepts in robotics, computer vision, and deep learning.

#### **Awards and Honors:**

- Fully Funded PhD Program in Computer Science, Orebro Unversity, Sweden.
- National Taiwan University Regulations Governing Academic Research Fellowship for Outstanding International Graduate Students 2016.
- 2016 CTCI Scholarship for Oversea Graduate Students in Taiwan.
- Award for being ranked 1st among the master students graduated at the Institute of Automation Technology (2016), National Taipei University of Technology.
- The second place of Intelligent Automation Equipment Invention Award 6th 2016, Taiwan.
- Best Poster Award at International Conference on Inventions (ICI) 2015.
- The honorable award of 2015 Robot Competition for innovative smart application on industrial robot, Taiwan.
- National Taipei University of Technology Scholarship for Outstanding International Master's Students (2014-2015).

## **Recent Publications**

#### Conference Rank A\*:

- **1. Hoang, D. C.,** Stork, J. A., & Stoyanov, T. (2022). Voting and Attention-based Pose Relation Learning for Object Pose Estimation from 3D Point Clouds. *The 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2022)*, Kyoto, Japan, October 23-27, 2022. PDF
- **2. Hoang, D. C.,** Stork, J. A., & Stoyanov, T. (2022). Context-Aware Grasp Generation in Cluttered Scenes. *IEEE International Conference on Robotics and Automation (ICRA 2022)*, Philadelphia, USA, May 23-27, 2022. PDF
- **3. Hoang, D. C.**, Lilienthal, A. J., & Stoyanov, T. (2020). Panoptic 3D Mapping and Object Pose Estimation Using Adaptively Weighted Semantic Information. *IEEE International Conference on Robotics and Automation (ICRA 2020)*, *Paris, France, May 31-Jun 4*, 2020. PDF code video

### **ISI/SCOPUS Q1:**

**4. Hoang, D.C.**, Stork, J.A. and Stoyanov, T., 2022. Voting and Attention-Based Pose Relation Learning for Object Pose Estimation From 3D Point Clouds. *IEEE Robotics and Automation Letters*, *7*(*4*), *pp.8980-8987*. <u>PDF</u>

- **5. Hoang, D. C.**, Lilienthal, A. J., & Stoyanov, T. (2020). Object-RPE: Dense 3D reconstruction and pose estimation with convolutional neural networks. *Robotics and Autonomous Systems (RAS)*, 133, 103632. PDF code video
- **6. Hoang, D. C.**, Lilienthal, A. J., & Stoyanov, T. (2020). Panoptic 3D Mapping and Object Pose Estimation Using Adaptively Weighted Semantic Information. *IEEE Robotics and Automation Letters (RAL)*, 5(2), 1962-19. PDF <u>code video</u>
- **7. Hoang, D. C.**, Chen, L. C., & Nguyen, T. H. (2016). Sub-OBB based object recognition and localization algorithm using range images. Measurement Science and Technology, 28(2), 025401. PDF code video

*ICRA*, *RAL*, and *RAS* are top conferences and journals in robotics and artificial intelligence. Sources: google scholar and scimagoir.

Please find my full publication list on research gate or google scholar.