

CONTACT INFORMATION	Email: ductuan.ngo99@gmail.com Google Scholar: Tuan Duc Ngo Homepage: https://ngoductuanlhp.github.io/ Github: https://github.com/ngoductuanlhp	
RESEARCH INTERESTS	My research interests are in the field of computer vision, with a specific focus on 3D understanding. I am developing algorithms and techniques for understanding the geometry and semantics of 3D scenes, with applications in autonomous driving, robotics, and augmented reality. I am also interested in exploring the possibilities of real-time deep learning on edge devices.	
EDUCATION	Ho Chi Minh City University of Technology (HCMUT), Bachelor of Computer Engineering, English Program	Ho Chi Minh City, Vietnam Aug 2017 - Aug 2021
	<ul style="list-style-type: none"> • Rank: 1/3000, <i>Valedictorian</i> • GPA: 9.62/10.00 \approx A+, <i>Excellent Degree</i> • Thesis: “Real-time monocular 3D object detection system on embedded device” – Thesis Grade: 10.00/10.00 • Advisors: Dr. Duc Dung Nguyen and Dr. Hoang-Anh Pham 	
	Le Hong Phong High School for the Gifted, Major in <i>Mathematics</i>	Ho Chi Minh City, Vietnam Aug 2014 - Jun 2017
PUBLICATIONS	Conferences <ul style="list-style-type: none"> • Duc-Tuan Ngo, Binh-Son Hua, Khoi Nguyen, “ISBNet: a 3D Point Cloud Instance Segmentation Network with Instance-aware Sampling and Box-aware Dynamic Convolution”, Under review at <i>Computer Vision and Pattern Recognition Conference (CVPR)</i>, 2023 • Duc-Tuan Ngo and Khoi Nguyen, “Geodesic-Former: a Geodesic-Guided Few-shot 3D Point Cloud Instance Segmenter”, in <i>European Conference on Computer Vision (ECCV)</i>, 2022 Journals <ul style="list-style-type: none"> • Bui MV*, Ngo DT*, Pham H, Nguyen DD., “GAC3D: improving monocular 3D object detection with ground-guide model and adaptive convolution”, <i>PeerJ Computer Science Journal (a Q1 Computer Science Journal)</i>, 2021 	
RESEARCH EXPERIENCE	VinAI Research, <i>AI Research Resident</i>	Ha Noi, Vietnam Aug 2021 - now
	<ul style="list-style-type: none"> • Advisor: Dr. Khoi Nguyen, AI Research Scientist • Main research topics: 3D Object Detection, 3D Point Cloud Instance Segmentation • Project: “3D Point Cloud Instance Segmentation” <ul style="list-style-type: none"> – Introduce an efficient and robust sampling strategy and propose leveraging the bounding box as a geometric cue for 3D point cloud instance segmentation task. • Project: “Few-shot 3D Point Cloud Instance Segmentation” <ul style="list-style-type: none"> – Propose a new task of 3D understanding, Few-shot 3D point cloud instance segmentation, and address it with a transformer-based 3D instance segmenter leveraging geodesic distance as a strong geometric cue. 	
	<i>AI Engineer (Applied Rotation Program)</i>	Jul 2022 - Oct 2022
	<ul style="list-style-type: none"> • Advisor: Mr. Tuan Ho, AI Research Engineer • Project: “Bird-eye-view semantic segmentation from multi-view fisheye images” <ul style="list-style-type: none"> – Participate in the Surrounding-View-Monitoring team to design and develop a new “Bird-eye-view semantic segmentation” feature, including data preparation, modeling, and deploying. • Awarded as the best Applied Rotation Program project. 	

TECHNICAL TALKS	<ul style="list-style-type: none"> Geodesic-Former: a Geodesic-Guided Few-shot 3D Point Cloud Instance Segmenter, <i>VinAI Research</i>, slide, video Nov, 2022
HONORS AND AWARDS	<ul style="list-style-type: none"> Class of 2021 Valedictorian of HCMUT (Rank 1/3000, graduated with the highest GPA (9.62/10.0 \approx A+)) 2021 Scholarships for outstanding academic achievements, HCMUT 2017 - 2021 Honda Award (Awarded to top 100 undergraduate students in Vietnam) 2020 Third Prize in the final round of Digital Race - FPT 2020 First Prize in The 6th Science and Technology Symposium for OISP Students, HCMUT 2020 KMS Talent Scholarship (Awarded to top 4 students in the CSE Faculty at HCMUT) 2019 Gold Medals in Vietnam Southern Regional Olympiad in Physics 2015, 2016
TECHNICAL SKILLS	<p>Programming skills:</p> <ul style="list-style-type: none"> Proficient: Python (PyTorch, TensorFlow, numpy, scikit-learn) Familiar: C++, C#, Latex <p>Tools:</p> <ul style="list-style-type: none"> ROS, Microsoft Azure, Docker, TensorRT, TensorFlow Lite
LANGUAGES	<ul style="list-style-type: none"> Vietnamese: Native English: Proficient <ul style="list-style-type: none"> – IELTS: 7.5 (L: 8.0, R: 7.5, W: 7.0, S: 7.0)
REFERENCES	<p>Assoc. Prof. Minh Hoai Nguyen Associate Professor Department of Computer Science Stony Brook University, US E-mail: minhhoai@cs.stonybrook.edu</p> <p>Dr. Khoi Nguyen Research Scientist VinAI Research, Vietnam Email: ducminhkhoei@gmail.com</p> <p>Dr. Duc Dung Nguyen Researcher, Lecturer Faculty of Computer Science and Engineering Ho Chi Minh City University of Technology, Vietnam Email: nddung@hcmut.edu.vn</p>