Tran-Nguyen Ngoc-Duong

Curriculum Vitae

Yuljeon-ro, 85beon-gil9, Seobu-ro
Jangan-gu, Suwon-si, Gyeong Gi-do
Republic of Korea
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Personal Information

Name	*Tran Nguyen Ngoc Duong*
Date of Birth	August 17, 1992
Place of Birth	Nha Trang, Khanh Hoa, Vietnam
Nationality	Vietnamese

Education

2007 - 2010 **Class in Physics**, *Le Quy Don high school for Gifted*, Nha Trang, Khanh Hoa.

2010 - 2015 **Bachelor of Computer Science Engineering**, *International University of Ho Chi Minh National University*, Ho Chi Minh, *GPA = 3.71/4.0*.
- Thesis title: The Background Subtraction in traffic surveillance system.
- Mentor: Dr. Synh Viet-Uyen Ha.
- Area of Study: Computer Vision, Digital Image Processing

2015 - 2018 **Master of Engineering in Information Technology Management**, *International University of Ho Chi Minh National University*, Ho Chi Minh, *GPA = 3.68/4.0*.
- Thesis title: A Robust Background Subtraction algorithm for Traffic Surveillance System in Different Scenes.
- Mentor: Dr. Synh Viet-Uyen Ha.
- Area of Study: Computer Vision, Digital Image Processing

2018 - now **PhD student in College of Information and Communication Engineering**, *Sungkyunkwan University*, Republic of Korea.
- Mentor: Prof. Jae Wook Jeon.
- Area of Study: Computer Vision, Digital Image Processing

Research/Work Experience

Project

2014 - 2016 Researching video technologies in traffic monitoring system

- Level: Research project of International University of Ho Chi Minh National University.
- Principal investigator: Dr.Ha Viet Uyen Synh.
- Field: Computer Vision.
- Evaluation: Excellent.
- Role: Member.

2014 - 2015 **Advanced background subtraction in traffic monitoring system**
- Level: Research project for student.
- Supervisors: Dr.Ha Viet Uyen Synh.
- Field: Computer Vision.
- Evaluation: Excellent.
- Role: Principal Investigator.

2016 - 2017 **A Traffic Surveillance System For Detecting And Tracking Vehicles At Nighttime**
- Level: Research project for student.
- Supervisors: Dr.Ha Viet Uyen Synh.
- Field: Computer Vision.
- Evaluation: Good.
- Role: Principal Investigator.

2018 - now **A Smartphone-based Measuring System for Gap and Flush**
- Supervisors: Prof. Jae Wook Jeon.
- Field: Computer Vision.
- Role: Member.

2018 - now **Autonomous Driving Sensor Project**
- Supervisors: Prof. Jae Wook Jeon.
- Field: Computer Vision.
- Role: Member.

Research Assistant

2014 - 2018 **Computer Vision and Image Processing lab, International University - VNU HCMC, Ho Chi Minh, Vietnam**
- Research supervisors: Dr.Ha Viet Uyen Synh.
- Research: Background Subtraction.
- Project: Traffic Surveillance System in Crowded City.
- Role: Research Assistant.

Languages

Vietnamese	**Mother tongue**
English	**IELTS 6.0**

Journal Papers

2014 *Tien Phuoc Nguyen*, **Duong Nguyen- Ngoc Tran**, *Tu Kha Huynh, Synh Viet-Uyen Ha, "Disorder detection approach to background modeling in traffic surveillance system"* , Journal of Science and Technology (Vietnam Academy of Science and Technology), P.140-149, vol. 52 n. 4A, 2014.

2016 **Duong Nguyen - Ngoc Tran**, *Tien Phuoc Nguyen, Tai Nhu Do, Synh Viet-Uyen Ha, "Subsequent processing of Background Modeling for Traffic Surveillance System"*, International Journal of Computer Theory and Engineering, vol. 8, pp. 235, June 2016, Doi: 10.7763/IJCTE.2016.V8.1050..

2018 *Synh Viet-Uyen Ha, Son Dao*, **Duong Tran**, *Tien Nguyen, "High Variation Removal for Background Subtraction in Traffic Surveillance Systems"* , IET Computer Vision, 2018, Doi: 10.1049/iet-cvi.2018.5033.

2020 *Long Hoang Pham, Son Dao*, **Duong Tran**, *Jin Young Byun, ChulHong Rhie; Jae Jeon, "A Smartphone-based Laser Measuring System for Gap and Flush Assessment in Car Body"* , in IEEE Transactions on Industrial Electronics, 2018, doi: 10.1109/TIE.2020.2992971.

Conference/Workshop Papers

2014 *Tien Phuoc Nguyen*, **Duong Nguyen- Ngoc Tran**, *Tu Kha Huynh, Synh Viet-Uyen Ha, "Disordered detection approach to background modeling in traffic surveillance system", International Conference on Advanced Computing and Applications* , ACOMP 2014

2015 **Duong Nguyen - Ngoc Tran**, *Tien Phuoc Nguyen, Tai Nhu Do, Synh Viet-Uyen Ha, "Subsequent processing of Background Modeling for Traffic Surveillance System"*, 7th International Conference on Computer Research and Development, ICCRD 2015.

2017 **Duong Nguyen - Ngoc Tran**, *Long Hoang Pham, Ha Manh Tran, Synh Viet-Uyen Ha, "Probabilistic Model and Neural Network for Scene Classification in Traffic Surveillance System"*, 4th International Conference on Information System Design Intelligent Applications, INDIA 2017.

2017 *Hung Ngoc Phan*, **Duong Nguyen- Ngoc Tran**, *Long Hoang Pham, Synh Viet-Uyen Ha, "Occlusion Vehicle Segmentation Algorithm in Crowded Scene for Traffic Surveillance System"*, 4th International Conference on Information System Design Intelligent Applications, INDIA 2017

2017 **Duong Nguyen - Ngoc Tran**, *Long Hoang Pham, Ha Manh Tran, Synh Viet-Uyen Ha, "Scene Recognition in Traffic Surveillance System using Neural Network and Probabilistic Model"*, 2017 IEEE International Conference on System Science and Engineering,, ICSSE 2017.

2017 *Hung Ngoc Phan*, **Duong Nguyen- Ngoc Tran**, *Long Hoang Pham, Synh Viet-Uyen Ha, "Occlusion Vehicle Detection Algorithm in Crowded Scene for Traffic Surveillance System"*, 2017 IEEE International Conference on System Science and Engineering, ICSSE 2017

2020	**Duong Nguyen- Ngoc Tran**, *Huy-Hung Nguyen, Long Hoang Pham, Jae Wook Jeon, "Object Detection with Deep Leaning on Drive PX2"*, The Fifth International Conference on Consumer Electronics (ICCE) Asia 2020, ICCE 2020
2020	*Long Hoang Pham*, **Duong Nguyen- Ngoc Tran**, *Jae Wook Jeon, "Low-Light Image Enhancement for Autonomous Driving Systems using DriveRetinex-Net"*, The Fifth International Conference on Consumer Electronics (ICCE) Asia 2020, ICCE 2020
2020	*Huy-Hung Nguyen*, **Duong Nguyen- Ngoc Tran**, *Jae Wook Jeon, "Towards Real-Time Vehicle Detection on Edge Devices with Nvidia Jetson TX2"*, The Fifth International Conference on Consumer Electronics (ICCE) Asia 2020, ICCE 2020

Programming skills

Core Programming Language	C/C++, Python
Libraries/Tools	OpenCV, CUDA, Tensorflow

Award/Honor

2007	Second prize of Programming contest for Youth of Vietnamese Post Office
2008	Silver medal - 30th of April in High school Olympiad
2009	Bronze medal - 30th of April in High school Olympiad
2010-2014	Annual scholarship in International University of Ho Chi Minh National University
2012	International University's "Good at 5 Aspects" Title 2012: Ethics, Academic Accomplishment, Physical Fitness, Skills, Intergration
2013	Consolation prize - International Olympiad in Informatics for University
2013	International University's "Good at 5 Aspects" Title 2013: Ethics, Academic Accomplishment, Physical Fitness, Skills, Intergration
2013	The 2013 ACM-ICPC Asia Regional Contest - Danang Site - Honorable Mention
2015	Third prize of Student Research for Ho Chi Minh National University
2019	Second prize of Recognition Competition for Automated Vehicle, Korea Dataset of Autonomous Solution (KODAS)
2020	First prize of Recognition Competition for Automated Vehicle, Korea Dataset of Autonomous Solution (KODAS)

Fields of Interest

- Computer Vision
- Image Processing
- Machine Learning
- Deep Learning

References

Ha Viet Uyen Synh, Ph.D.
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International University of Ho Chi Minh National University
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Ho Chi Minh 70000, Viet Nam
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