

# TUAN-ANH VU

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Hai Hau, Nam Dinh, Viet Nam | July 10, 1993  
ADDRESS: Room 609CM, Tower B, University Apartment, The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong  
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## EDUCATION

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2019 - now **Ph.D. student in Computer Science and Engineering**, Hong Kong University of Science and Technology.  
**Supervisor:** Assoc. Prof. Sai-Kit Yeung  
**Area of Study:** Deep Learning, 3D Reconstruction, Scene Understanding

2011 - 2016 **B.Sc. in Computer Science**, International University - Vietnam National University HCM City  
**Supervisor:** Synh Viet-Uyen Ha, Ph.D.  
**Thesis title:** Extend Traffic Signs Detection and Recognition Algorithm in Nighttime in Viet Nam.

## PUBLICATIONS

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### JOURNAL PAPERS

OCT - 2018 Synh Viet-Uyen Ha, **Tuan-Anh Vu**, and Ha Manh Tran, "**An Extended Occlusion Detection Approach for Video Processing**", REV Journal on Electronics and Communications, Vol 8, No. 3-4, pp. 55-64, 2018.

### CONFERENCE/WORKSHOP PAPERS

JUL - 2017 **Tuan-Anh Vu**, Long Hoang Pham, Tu Kha Huynh, and Synh Viet-Uyen Ha, "**Nighttime Vehicle Detection and Classification via Headlights Trajectories Matching**", 2017 IEEE International Conference on System Science and Engineering (ICSSE 2017), Ho Chi Minh, Vietnam, July 21-23, 2017.

JAN - 2018 **Tuan-Anh Vu**, Long Hoang Pham, Tu Kha Huynh, and Synh Viet-Uyen Ha, "**Vehicle Classification in Nighttime using Headlights Trajectories Matching**", in Advances in Intelligent Systems and Computing, 672, pp. 663-673, Springer, Jan 2018.

JAN - 2019 **Tuan-Anh Vu**, Hung Ngoc Phan, Tu Kha Huynh, and Synh Viet-Uyen Ha, "**An Improved Occlusion Detection with Constraints Approach for Video Processing**", in Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, 257, pp. 232-242, Springer, Jan 2019.

JAN - 2020 Long Hoang Pham, Hung Ngoc Phan, Nhat Minh Chung, **Tuan-Anh Vu** and Synh Viet-Uyen Ha, "**A Robust Multiclass Vehicle Detection and Classification Algorithm for Traffic Surveillance System**", The 2020 IEEE-RIVF International Conference on Computing and Communications Technologies, Ho Chi Minh, Vietnam, April 6-7, 2020 (accepted).

## RESEARCH/WORK EXPERIENCE

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### PROJECT/RESEARCH EXPERIENCE

2015 - 2016 **International University research project for student (Principle Investigator)** - Traffic Sign Detection and Recognition in Nighttime in Vietnam

2016 - 2017 **International University research project for student (Principle Investigator)** - A Traffic Surveillance System For Detecting And Tracking Vehicles At Nighttime

2016 - 2018 **Viet Nam National University research project (Key member)** - Advanced Occlusion Detection Algorithm in Video Processing Applications

2016 - 2018 **Ho Chi Minh City People Committee (Key member)** - Piloting Project on The Intelligent Traffic System of Ho Chi Minh City

2017 - 2018 **Ho Chi Minh City Department of Science (Key member)** - Develop Vehicle Detection and Classification Algorithm in Crowded Scene for Traffic Surveillance System

2017 - 2018    **International University research project for student (Principle Investigator)** - An Extended Vehicle Classification Algorithm in Traffic Surveillance System Using Principal Component Analysis

## WORK EXPERIENCE

2017 - 2019    **Teaching Assistant and Research Assistant**, School of Computer Science and Engineering, International University - Vietnam National University Ho Chi Minh City

## HONORS & AWARDS

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2014 - 2015    **Scholarship for Excellent Academic Performance**, International University - Vietnam National University HCM City

2017    **Scholarship for Master by Research program in Information Technology**, International University - Vietnam National University HCM City

2019    **Scholarship for SENG Summer Camp for Elite Students**, The Hong Kong University of Science and Technology, Jul 7-13, 2019

## LANGUAGES

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VIETNAMESE:    Mother-tongue

ENGLISH:    IELTS 6.0 (2018)

## PROGRAMMING SKILLS

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Core Programming    C/C++, Java, Qt, OpenCV

Basic Programming    TensorFlow, Pytorch, Python, HTML, Javascript, SQL, CUDA, R

## REFERENCES

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### **Assoc. Prof. Sai-Kit Yeung**

Division of Integrative Systems and Design (ISD)  
Department of Computer Science and Engineering (CSE)  
The Hong Kong University of Science and Technology  
Email: saikit@ust.hk

### **Dr. Synh Viet-Uyen Ha**

Head of Office of Undergraduate Academic Affairs,  
Head of Computer Vision and Image Processing Lab,  
Lecturer at School of Computer Science and Engineering,  
Vietnam National University - HCMC – International University.  
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### **Dr. Nguyen Thi Thanh Sang**

Head of Center of Information Services,  
Lecturer at School of Computer Science and Engineering,  
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### **Assoc. Prof. Ly Le**

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Head of Computational Biology Center,  
Vietnam National University - HCMC – International University.  
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