

TUAN-ANH VU

PERSONAL DATA

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

- 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

JOURNAL PAPERS

- 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

- 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.
- 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.
- 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 Industrial Networks and Intelligent Systems. INISCOM 2018. LNICST, volume 257, pp. 232-242, Springer, Jan 2019.
- 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**,” 2020 IEEE International Conference on Computing and Communication Technologies (RIVF), Ho Chi Minh, Vietnam, April 6-7, 2020.

PREPRINT

- 2020 Yingshu Chen, **Tuan-Anh Vu**, Binh-Son Hua and Sai-Kit Yeung, “**Deep Style Transfer for Time-lapse Architectural Photograph**,” submitted to the 2021 International Conference on Computational Photography (ICCP) 2021.
- 2020 Yingshu Chen*, **Tuan-Anh Vu***, Wishsmitha Samadhi Mendis* and Sai-Kit Yeung, “**Automated Colorized 3D Object Model Generation with RGB-D Images**,” submitted to SIGGRAPH 2021.
- 2020 **Tuan-Anh Vu***, Quang-Hieu Pham*, Binh-Son Hua, Duc-Thanh Nguyen and Sai-Kit Yeung, “**Persistent Feature Learning for Large-Scale 3D Semantic-Instance Segmentation**,” submitted to TPAMI.

RESEARCH/WORK EXPERIENCE

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 (Member)** - Piloting Project on The Intelligent Traffic System of Ho Chi Minh City
- 2017 - 2018 **Ho Chi Minh City Department of Science (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
- 2019 - 2021 **WeBank and HKUST (Member)** - Innovative, Interactive, and Collaborative Online Advertising
- 2020 - 2021 **Bridge Gap Fund (BGF) - HKUST (Member)** - Real-time automatic and interactive 3D semantic and instance reconstruction system

WORK EXPERIENCE

- 2017 - 2019 **Teaching Assistant and Research Assistant**, School of Computer Science and Engineering, International University - Vietnam National University Ho Chi Minh City
- 2020 **Teaching Assistant**, Department of Computer Science and Engineering, Hong Kong University of Science and Technology

HONORS & AWARDS

- 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
- 2019 - 2023 **Postgraduate Scholarship**, The Hong Kong University of Science and Technology
- 2020 **Best Poster Award**, Machine Learning Summer School Indonesia (MLSS-Indo) 2020

SKILLS

- Languages Vietnamese (native), English (fluent), Cantonese (beginner)
- Programming C/C++, Java, Python, HTML/CSS, ...
- Frameworks TensorFlow, Pytorch, OpenCV, Qt, OpenGL, WebGL, ...

REFERENCES

Assoc. Prof. Sai-Kit Yeung

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Department of Computer Science and Engineering (CSE),
The Hong Kong University of Science and Technology
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Dr. Synh Viet-Uyen Ha

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