



# VU DUC QUANG

Research Scholar - Computer Science & Engineering

## EDUCATION

**Ph.D. - Computer Science & Information Engineering**  
**National Central University, Taoyuan, Taiwan**

2017 - ongoing

Passed with **3.8 GPA**. Thesis mark A+ with the title "Knowledge Distillation-based Models for Action Recognition".

**Master. - Information System**  
**VNU University of Engineering and Technology, Ha Noi, Vietnam**

2013 - 2016

Passed with **2.91 GPA**. Thesis mark A+ with the title "Application of ant colony optimization to solve facility location problems".

**Bachelor. - Information Education**  
**Thai Nguyen University of Education, Thai Nguyen, Vietnam**

2009 - 2013

Passed with **2.85 GPA**.

## CONTACT

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My research interests are computer vision, image processing, machine learning and AI, optimization and approximate algorithms.

## SKILLS

**Machine Learning** 4+ yrs

**Deep Learning** 4+ yrs

**Python** 4+ yrs

**C++** 3+ yrs

**C#** 2+ yrs

**Linux** 3+ yrs

## WORK EXPERIENCE

**Lecturer**  
**Department of Information System - Faculty of Mathematic - Thai Nguyen University of Education (Vietnam)**

Sep 2013 - Now

## PUBLICATIONS

**(2+1)D Distilled ShuffleNet: A Lightweight Unsupervised Distillation Network for Human Action Recognition**

Top Conference

Duc-Quang Vu, Ngan Le, and Jia-Ching Wang,

IEEE International Conference on Pattern Recognition (ICPR), 2022

**Selective Mutual Learning: An Efficient Approach for Single Channel Speech Separation**

Top Conference

H. M. Tan, D. -Q. Vu, C. -T. Lee, Y. -H. Li and J. -C. Wang

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022, pp. 3678-3682

**Self-knowledge Distillation: An Efficient Approach for Falling Detection**

SCOPUS

Duc, Q., Phung, T., Nguyen, M., Nguyen, B., Nguyen, T.

Lecture Notes on Data Engineering and Communications Technologies, vol 124. Springer, Cham.

# ACHIEVEMENTS

## AWARDS AND HONOURS

- 2<sup>nd</sup> in National Informatics Olympiad for Universities, Vietnam in 2009.
- 3<sup>rd</sup> in National Informatics Olympiad for Universities, Vietnam in 2011.
- 4<sup>th</sup> in Young Scientist Talent Contest for Universities, Vietnam in 2012.

### **A (2+1)D Attention Convolutional Neural Network for Video Prediction**

**Phung, T., Nguyen, V.T., Ma, T.H.T., Duc, Q.V.**

Lecture Notes on Data Engineering and Communications Technologies, vol 124. Springer, Cham.

SCOPUS

### **Teaching Yourself: A Self-Knowledge Distillation Approach to Action Recognition**

**D. -Q. Vu, N. Le and J. -C. Wang**

IEEE Access, vol. 9, pp. 105711-105723, 2021

SCIE - IF 3.36

### **A Novel Self-Knowledge Distillation Approach with Siamese Representation Learning for Action Recognition**

**D. -Q. Vu, T. -T. Phung and J. -C. Wang**

International Conference on Visual Communications and Image Processing (VCIP), 2021, pp. 1-5

Top Conference

### **Self-Supervised Learning for Action Recognition by Video Denoising**

**T. T. Trang Phung, T. Hong Thu Ma, V. T. Nguyen and D. Quang Vu**

International Conference on Computing and Communication Technologies (RIVF), 2021, pp. 1-6

SCOPUS

### **Age and Gender Recognition Using Multi-task CNN**

**D. -Q. Vu, T. -T. Phung, C. -Y. Wang and J. -C. Wang**

Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC), 2019, pp. 1937-1941

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### **A Hybrid Tabu Search-Based Artificial Immune Algorithm For Construction Site Layout Optimization**

**Vu Duc Quang, Hoang Xuan Huan, Nguyen Van Truong, Vu Thi Thuy**

Journal of Research and Development on Information and Communication Technology, 2018, 03(15), pp. 1-7.

### **A hybrid algorithm between aiNet and Tabu search solves the problem of Single Row Facility Layout**

**Phung Thi Thu Trang, Ngan Hoang My Linh, Vu Duc Quang**

Journal of Science and Technology, Thai Nguyen University, 2017, 02(162), pp. 171-175.

### **An improved artificial immune network for solving construction site layout optimization**

**D. Q. Vu, V. T. Nguyen and X. H. Hoang**

IEEE RIVF International Conference on Computing & Communication Technologies, Research, Innovation, and Vision for the Future (RIVF), 2016, pp. 37-42

SCOPUS

### **An efficient algorithm based on the ant colony optimization algorithm to solve the rlp centroid problem**

**D. Q. Vu, X. H. Hoang and Do Thanh Mai**

FAIR 09, 2016, pp. 488-494

### **Some improvements of selection algorithms for spam email filtering**

**Nguyen Van Truong, Pham Dinh Lam, Vu Duc Quang**

Journal of Science and Technology, Thai Nguyen University, 2016, 6 (151), 85-91.

**Email SPAM Filtering Using R-Chunk Detector-Based  
Negative Selection Algorithm**

**Vu Duc Quang, Vu Manh Xuan, Nguyen Van Truong,  
Phung Thi Thu Trang**

Journal of Science and Technology, Thai Nguyen University, 2015, 135  
(05), 185-189.

**A fast r-chunk detector-based negative selection al-  
gorithm**

**Nguyen Van Truong, Vu Duc Quang, Trinh Van Ha**

Journal of Science and Technology, Thai Nguyen University, 2012, 2 (90),  
55-58.