VU DUC QUANG

Research Scholar - Computer Science & Engineering

EDUCATION

Ph.D. - Computer Science & Information Engineering
National Central University, Taoyuan, Taiwan — **2017 - 2022**

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**.

WORK EXPERIENCE

Lecturer
Department of Information System - Faculty of Mathematic - Thai Nguyen University of Education (Vietnam) — **Sep 2013 - Now**

Postdoctoral Research Fellow
Department of Computer Science and Information Engineering, National Central University, Taoyuan, Taiwan — **2022 - 2023**

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PUBLICATIONS

Cyclic Transfer Learning for Mandarin-English Code-Switching Speech Recognition — **SCIE Q1**
Cao Hong Nga*, Duc-Quang Vu*, Huong Hoang Luong, Chien-Lin Huang, and Jia-Ching Wang,

IEEE Signal Processing Letters, 2023 (accepted).

Selective Mutual Learning: An Efficient Approach for Single Channel Speech Separation — **Top Conference**
Ha Minh Tan*, Duc-Quang Vu*, and Jia-Ching Wang

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2023, (accepted))

CONTACT

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

SKILLS

Machine Learning	4+ yrs
Deep Learning	4+ yrs
Python	4+ yrs
C++	3+ yrs
C#	2+ yrs
Linux	3+ yrs

ACHIEVEMENTS

AWARDS AND HONOURS

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

Deep Learning for Human Action Recognition: A Comprehensive Review
ESCI Q2
Duc-Quang Vu, Trang Phung Thi Thu, Ngan Le, and Jia-Ching Wang,

APSIPA Transactions on Signal and Information Processing, 2023 (accepted).

Deep Models for Mispronounce Prediction for Vietnamese Learners of English
SCOPUS
Phung, T., Vu, D. Q., Mai-Tan, H., and Nhung, L. T.

Communications in Computer and Information Science, vol 1688. Springer, 2022, pp. 682-689.

(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, pp. 3197-3203.

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.

A (2+1)D Attention Convolutional Neural Network for Video Prediction
SCOPUS
Phung, T., Nguyen, V.T., Ma, T.H.T., Duc, Q.V.

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

Teaching Yourself: A Self-Knowledge Distillation Approach to Action Recognition
SCIE - IF 3.36
D. -Q. Vu, N. Le and J. -C. Wang

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

A Novel Self-Knowledge Distillation Approach with Siamese Representation Learning for Action Recognition
Top Conference
D. -Q. Vu, T. -T. -T. Phung and J. -C. Wang

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

Self-Supervised Learning for Action Recognition by Video Denoising
SCOPUS
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

Age and Gender Recognition Using Multi-task CNN
SCOPUS
D. -Q. Vu, T. -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

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

SCOPUS

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

An efficient algorithm based on the ant colony optimization algorithm to solve the r|p 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 algorithm
Nguyen Van Truong, Vu Duc Quang, Trinh Van Ha

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