Khiem H. Le (B.Sc.)

PERSONAL INFORMATION

Research Assistant
VinUniversity, Hanoi, Vietnam
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Google Scholar: https://bit.ly/3sw7e61

EDUCATION

Bachelor of Science (Honours) - Major: Mathematics   Sep 2017 - Sep 2021
Faculty of Mathematics and Computer Science, VNUHCM - University of Science
Graduation Thesis: Vietnamese Sentiment Classification Using Deep Learning Methods

RESEARCH EXPERIENCE

Research Assistant   Jan 2023 - Present
Security and Artificial Intelligence Lab   VinUniversity

- *Project: Federated Domain Generalization*
  Study the domain generalization problem under the federated learning setting
- *Project: Federated Learning for Internet of Things*
  Explore challenges and practicalities of federated learning for IoT applications

Research Assistant   Jan 2022 - Dec 2022
VinUni-Illinois Smart Health Center   VinUniversity

- *Project: ECG-Based Heart Arrhythmia Detection*
  Automatically identify abnormal heart rhythms based on reduced-lead electrocardiograms

Research Intern   Oct 2020 - Dec 2021
Smart Health Center at VinBigData   VinBigData Institution

- *Project: Abnormality Detection on Chest Radiographs*
  Automatically localize and classify thoracic abnormalities from chest X-ray scans

Research Intern   Jan 2020 - Sep 2020
Artificial Intelligence Solution for Industrial Applications Research Lab   VNUHCM - University of Science

- *Research Group: Vietnamese Natural Language Processing*
  Extract insights from text data and automate customer support

TEACHING EXPERIENCE

Academic Mentor   Jan 2023 - Present
FPT FUNiX

- *Machine Learning Certification*

Teaching Assistant   Apr 2023 - Present
College of Engineering and Computer Science, VinUniversity

- *Introduction to Programming (COMP1010)*
- *Undergraduate Research Opportunities Program (UROP)*

SELECTED PUBLICATIONS

SUBMITTED/UNDER REVIEW

Khiem Le-Huy, Long Ho-Tuan, Cuong Do-Danh, Danh Le-Phuoc, Kok-Seng Wong
Comprehensive Domain-Invariant Representation Learning for Federated Domain Generalization
Submitted to IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2024)

Kok-Seng Wong*, Manh Nguyen-Duc*, **Khiem Le-Huy***, Long Ho-Tuan, Cuong Do-Danh, Danh Le-Phuoc
An Empirical Study of Federated Learning on IoT-Edge Devices: Resource Allocation and Heterogeneity
Submitted to IEEE Transactions on Neural Networks and Learning Systems

PUBLISHED

Khiem H. Le, Hieu H. Pham, Thao BT. Nguyen, Tu A. Nguyen, Tien N. Thanh, Cuong D. Do
Enhancing Deep Learning-Based 3-Lead ECG Classification with Heartbeat Counting and Demographic Data
IEEE/EMBS Conference on Biomedical Engineering and Sciences (IECBES 2022)

Khiem H. Le, Hieu H. Pham, Thao BT. Nguyen, Tu A. Nguyen, Tien N. Thanh, Cuong D. Do
LightX3ECG: A Lightweight and Explainable Deep Learning System for 3-Lead Electrocardiogram Classification
Biomedical Signal Processing and Control

Khiem H. Le*, Tuan V. Tran*, Hieu H. Pham, Hieu T. Nguyen, Tung T. Le, Ha Q. Nguyen
Learning from Multiple Expert Annotators for Enhancing Anomaly Detection in Medical Image Analysis
IEEE Access

Cuong V. Nguyen, **Khiem H. Le**, Anh M. Tran, Quang H. Pham, Binh T. Nguyen
Learning for Amalgamation: A Multi-Source Transfer Learning Framework for Sentiment Classification
Information Sciences

STUDENT ACHIEVEMENTS

Salutatorian   VNU-HCM University of Science Entrance Exam 2017
Gold Medalist 20th Vietnam Southern Mathematical Olympiad for High School Students 2015

LANGUAGES

Vietnamese   Native
English   IELTS Overall Score: 6.5

REFERENCES

Binh T. Nguyen, Ph.D   Associate Professor
                              Faculty of Mathematics and Computer Science, VNUHCM - University of Science
                              ngtbinh@hcmus.edu.vn
Kok-Seng Wong, Ph.D   Associate Professor
                              College of Engineering and Computer Science, Vinuniversity
                              wong.ks@vinuni.edu.vn