# Khiem H. Le (B.Sc.)

## PERSONAL INFORMATION

#### Research Assistant

VinUniversity, Hanoi, Vietnam

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Webpage: https://lhkhiem28.github.io 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

VinUniversity

VinUni-Illinois Smart Health Center

• 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 International Conference on Artificial Intelligence and Statistics (AISTATS 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 20<sup>th</sup> 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

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