Hieu Vu

Email: vutronghieu.04012203@gmail.com **Website:** https://hieuvt29.github.io/

RESEARCH INTERESTS

I'm curious about machine learning methods for limited/corrupted supervision data. Currently, I mainly focus on the techniques of Active Learning for selecting data samples to annotate, as well as Bayesian Inference framework and Distributionally Robust Optimization for enhancing the quality and robustness of ML models.

ACADEMIC BACKGROUND

Hanoi University of Science and Technology (HUST) Hanoi, Vietnam
Excellence Degree *of Engineer in Information Systems, CPA* 3.63/4.0 *Aug.* 2014 – *Mar.* 2019

SELECTED AWARDS

Excellence scholarship for the academic year of 2018 – 2019
Granted for top 1% *students with highest CPA of School of Information and Communication Technology, HUST*

NOTABLE RESEARCH WORKS

Distributionally Robust Fair Principal Components via Geodesic Descents
*****Hieu Vu***, *Toan Tran, Man-Chung Yue, Viet Anh Nguyen*
preprint, 2021

Bayesian Metric Learning for Robust Training of Deep Models under Noisy Labels
*****Hieu Vu***, *Toan Tran, Gustavo Carneiro*
preprint, 2020

MAP Estimation With Bernoulli Randomness, and Its Application to Text Analysis and Recommender Systems
*Xuan Bui, ****Hieu Vu***, *Oanh Nguyen, Khoat Than*
IEEE Access, 2020

RESEARCH EXPERIENCES

Research Resident Nov. 2019 – Present
VinAI Research *Hanoi, Vietnam*

- Supervisors: Toan Tran (Research Scientist, VinAI Research), Viet Anh Nguyen (Research Scientist, VinAI Research)
- Main research topics: Bayesian methods for Noisy Labels data, Active Learning, Domain Adaptation
- Gained Backgrounds: Linear Algebra, Statistic, and Generative Models, Robust Optimization

Undergraduate Research Assistant Jun. 2017 – Jun. 2019
Data Science Lab, School of Information and Communication Technology, HUST *Hanoi, Vietnam*

- Supervisors: Khoat Than (Associate Professor, HUST)
- Main research topics: Topic models
- Gained backgrounds: Linear Algebra, Topic modeling methods

INDUSTRIAL EXPERIENCES

Applied Rotation Program Resident Jun. 2021 – Sep. 2021
VinAI Research *Hanoi, Vietnam*

- Supervisor: Binh-Son Hua (Research Scientist, VinAI Research)
- Develop models to detect objects in 3D space, based on point cloud data
- Learned technologies: MMDetection3d framework

Software developer Jun. 2018 – Apr. 2019
VC Corporation *Hanoi, Vietnam*

- Develop recommendation system for news articles using ML models: RNN-based and CNN-based
- Build micro-service web server
- Learned technologies: Flask, Java-Jersey, Jetty framework, MySQL, Aerospike, Kafka

SKILLS

Spoken Languages: English (Fluent - IELTS 7.5), Vietnamese (Native)
Programming Languages: Python, Java, JavaScript, and C/C++
Technologies: Web-based: HTML/CSS/JS, ExpressJS, ReactJS; Databases: MySQL, MongoDB, Aerospike