Giang DO (JAMES)

Portfolio: linkedin.com/in/giang-do-hust/
Github: github.com/giangdip2410

Email: giangdo.utc@gmail.com
Mobile: +1-423-314-6643

Education

- **The University of Tennessee at Chattanooga** — TN, United States
  Master of Computer Science; GPA: 4.0/4.0 (Class rank 1st) — *Jan 2023 - Dec 2024*
  Courses: *Mathematical Statistics, Introduction to Machine Learning, Advanced Topics in Systems Software*
- **VNU University of Science** — Hanoi, Vietnam
  Master of Data Science; GPA: 3.75/4.0 (Class rank 2nd) — *Dec 2020 - Dec 2022*
  Courses: *Statistical Modeling, Analysis Of Algorithms, Mining Big Dataset, Machine Learning, Advanced Machine Learning*
- **Hanoi University of Science & Technology** — Hanoi, Vietnam
  Bachelor of Technology - Information Technology; GPA: 3.36/4.0 (Rank top 7%) — *Aug 2019 - June 2021*
  Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases*
- **Hanoi Foreign Trade University** — Hanoi, Vietnam
  Bachelor of International Business Economics; Degree classification: Good — *Aug 2010 - June 2014*

Projects

- **CV - Building Smart Parking System with License plate recognition model and Face identity recognition (Collaborate Linh T. Dang, Ph.D. HUST Computer Vision Lab)**: Building a smart system which is applied deep learning models to recognize Licence plate and Face identity recognition. Tech: Python, OpenCV, Pytorch, Python (July '20)
- **ML - Building machine learning models to predict building energy consumption**: Building machine learning models to predict building energy consumption from a dataset - ASHRAE - Great Energy Predictor III. Tech: Sklearn, Pyspark, Tensorflow, LightGBM, XGBoost, CatBoost (Oct '21)
- **ML - Framingham Heart Study**: Building Statistical models & machine learning models to predict the incidence and prevalence of cardiovascular disease. Tech: R, Python, Caret, Sklearn, H2O, XGBoost, LightGBM, CatBoost (May '21)
- **NLP - US Goverors' COVID-19 Tweets Classification (Collaborate with Hong Vu, Ph.D. - University of Kansas)**: Building a dataset and NLP models to classify US governors' tweets about Covid-19 . Tech: Python, BERT, NLTK, Word2Vec, GloVe, Pytorch (December '20)
- **NLP - Identifying Constructive Comments in English & Vietnamese (Collaborate with Tuan-Anh Hoang, Ph.D. VNU University of Science)**: Building a dataset for Vietnam Constructive Comments, Researching Machine Learning & Deep learning models to identify constructive comments for English (F1-score 93%) & Vietnamese (F1-score 87%). Tech: Python, NLTK, GloVe, Transformers, Tensorflow. (December '21)

Experience

- **Center for Urban Informatics and Progress, UTC** — TN, United States
  Research Assistant — *Jan 2023 - present*
  - **Data Fusion Project**: Research SOTA deep learning model for 2D Object Detection and 3D Object Detection & new techniques to utilize both camera and LiDAR data to enhance deep learning model performances.
  - **Large Language Models**: Research Hypernetworks and Sparse Mixture-of-Experts to enhance large language models such as Transformer-XL or RoBERTa. First author of the paper "HyperRouter: Towards Efficient Training and Inference of Sparse Mixture of Experts" which was submitted to EMNLP2023.
- **Panasonic R&D Center Vietnam** — Hanoi, VN
  Artificial Intelligence Project Leader — *Feb 2021 - Jan 2023*
  - **Digital Twin Project**: As a Project leader, guiding & managing a team with 4 developers to build a system for modeling and monitoring buildings.
  - **3D BIM & 3D Unity Construction**: As a Technical leader, proposing solutions and guiding team members to develop an application to construct 3D BIM & 3D Unity.
  - **3D Object Detection**: Training and fine-tuning SOTA 3D Object detection models which have an accuracy rate +5% higher than pre-trained models.
  - **Ceiling Light Recognition**: Proposing and implementing Unsupervised Learning Approach to recognize ceiling light from point cloud which achieved more than 90% accuracy.
  - **Semantic 3D Mapping**: Proposing and implementing algorithm to map 2D Image Instance Segmentation to 3D modeling.
- **Vietnam Technological and Commercial Joint Stock Bank** — Hanoi, VN
  Senior Data Scientist — *Oct 2019 - Jan 2021*
  - **Business Monitoring**: Building automatic reports and dashboards for daily business monitoring and tracking using SQL Server, Power BI and MS Report Builder.
  - **Business Enhancement**: Building Machine Learning systems to suggest prices for customers to sell or buy bonds helping customers to buy and sell bond/stock more easily.
  - **Business Operation**: Building Machine Learning models to detect abnormal logins and abnormal trading.
- **Toyota Motor Vietnam** — Hanoi, VN
  Data Analyst — *Jan 2016 - Jul 2019*
  - **Business Monitoring**: Building daily, monthly and yearly market sales and forecasting reports for TOP Managements.
  - **Business Enhancement**: Building time series models to forecast sales and reporting to TOP Managements for their decisions making in production and marketing strategy.

Honors and Awards

- The best master thesis with topic "Identify Constructive Comments for Vietnamese News" - Dec, 2022
- The best employee award, Panasonic R&D Vietnam - Jul, 2022
- The best project award, Panasonic R&D Vietnam - Dec, 2021
- The best graduation thesis with topic "Constructive Comment Classification" - Jun, 2021
- Vingroup Science and Technology Scholarship for master data science students - 2021-2022

Skills Summary

- **Languages**: Python, R, SQL, MATLAB, JAVA, Bash
- **Frameworks**: Scikit-learn, Pytorch, TensorFlow, H2O, Keras, NLTK, Pandas, Numpy, Flask, Huggingface, Streamlit
- **Tools**: Power BI, Docker, GIT, Neo4j, MySQL, SQLite
- **Platforms**: Linux, Windows, Kaggle, Colab, Azure, GCP
- **Soft Skills**: Leadership, Event Management, Writing, Public Speaking, Time Management

Reference

Assoc. Prof. Dr. Nguyen Thi Minh Huyen
Head of Department, Faculty of Mathematics,
Mechanics & Informatics
Vietnam National University, Hanoi (VNU)
✉ huyenntm@hus.edu.vn

Dr. Nguyen Ba Ngoc
Lecturer, Department of Computer Science
Hanoi University of Science and Technology (HUST)
✉ ngocnb@hust.edu.vn