PHAM Van Tuan

Machine learning engineer/Ph.D. of Computer Science

Passionate about Machine Learning and AI, I'm skilled in Python and have contributed to several industry and academic projects. Always learning and keeping up with the latest advancements of AI

PERSONAL INFORMATION

Fullname	: PHAM Van Tuan	Mobile phone	: +33749818545
Email	: phamtuantkt@gmail.com,	Residence	: Metz, France
LinkedIn	: linkedin.com/in/danielphamvt	Personal page	: *danielphamvt.github.io/cv*

EDUCATION

- **Ph.D. of Computer Science** — **University of Lorraine**
  (2020-2023) — *Metz, France*
- **Master II of Information Technology** (Eng. Prog.) — **University of Lorraine**
  (2015-2016) — *Metz, France*
- **Master I of Information Technology** (Eng. Prog.) — **University of Science and Technology of Hanoi**
  (2014-2015) — *Hanoi, Vietnam*
- **Bachelor of Management Information Systems** — **National Economics University**
  (2008-2012) — *Hanoi, Vietnam*

WORK EXPERIENCE

Postdoctoral/ R&D engineer *(12/2023 to 02/2024 - 3 months)* **LCOMP-University of Lorraine, Metz, France**

- Tech-lead in the project DCASOLVER (development stage), created an associated commercial website
- Implemented optimization algorithms for industrial challenges, with a focus on Logistics applications

PhD candidate *(10/2020 to 11/2023 – 3 years 1 months)* **LGIPM-University of Lorraine, Metz, France**

- Thesis: "*New Machine Learning Techniques for Finance and Healthcare*"
- Proposed new methods applied in SVM, Bagging, and BERT to handle some problems in health and finance

University Lecturer (08/2012 to 10/2020 – 8 years 2 months) **NEU, Hanoi, Vietnam**

- Taught courses: Fundamental Computer Science, Applied Informatics, Management Information Systems
- Conducted research in the domain of Artificial Intelligence

Data Engineer and Web Developer *(08/2019 to 12/2019 - 5 months)* **VinTech Group, Hanoi, Vietnam**

- Engaged in the implementation of an AI-based Logistics system (web) with Django, Boostrap, GoogleMap APIs for Vinmart's retail operations encompassing 2000 stores across Vietnam
- Collected data, built the pipeline for processing data, designed the SQL database

ML Engineer/ Product Owner *(12/2017 to 07/2019 – 1 year 8 months)* **NAL Jsc., Hanoi, Vietnam**

- Led a young and passionate team including 8 members
- Built AI-based applications for outsourcing projects: Operator Chatbot, Face lock System, Dialog System, and Social Sentiment Analysis

NLP Engineer *(10/2016 to 10/2017 – 1 year)* **Chappiebot Inc., Hanoi, Vietnam**

- Developed clever algorithms and pragmatic solutions for an AI-Based Car Search System
- Implemented NLP tasks: NER, Topics classifiers, Sentiment Analysis, and Dialogue Systems in Vietnamese

Research Intern *(04/2016 – 10/2016 - 6 months)* **LITA-Univesity of Lorraine, Metz, France**

- Thesis: "*Machine learning techniques for Autonomous Surface Vessels*"
- Conducted research on long-term autonomy and data acquisition for environmental monitoring using Reinforcement learning, robotics control techniques on Unmanned Surface Vehicles (USV)

SKILLS HIGHLIGHTS

- ✧ Machine learning, Data Processing, NLP Techniques, LLMs, Robotics (ROS)
- ✧ Full-stack Web (Django, Bootstrap, Restful API, Cloud services)
- ✧ Programming languages: Python, Matlab, C/C++
- ✧ Tools: Pytorch/Tensorflow, Sklearn, Pandas, Matplotlib, OpenCV
- ✧ MySQL/MSSQL, Linux/Bash, Windows/MacOS
- ✧ Agile Development, Git Flow, Docker, Prompt Engineering
- ✧ Independent Research, Problem Solving, Continuous Learning

PROJECTS

- ✧ **Drone allocation** for NAVAL Group, France in LGIPM (2022): Collaborated on a project with the University of Lorraine and Naval Group to optimize drone flight paths. Developed a Python-based simulation environment. Technologies utilized: Robotics, Python (OOP), Pygame
- ✧ **Robot navigation** for NAVAL Group, France in LGIPM (2020): Conducted research project with Univ. of Lorraine and Naval Group on ground robot path optimization. Technologies: Robotics, Computer vision, YOLO, Python, C++, Docker, Linux, ROS, Gazebo, SLAM, Path planning
- ✧ **Iris recognition & tracking** in NAL (2018): Contributed to an outsourcing project involving the tracking of Internet Japanese user behavior using iris recognition on mobile devices. Technologies involved: Computer Vision, YOLO, Python, Agile Management, RestAPI.
- ✧ **Facial recognition access control** (2018): Automated check-in and timekeeping for internal use at Nal Vietnam company. Employed technologies including Deep Learning, Few-shot Learning, Computer Vision, RestAPI, Linux, and Agile Dev.
- ✧ **Sentiment analysis for social risk** in NAL (2017): Led outsourcing project for Japanese client. Developed sentiment classification using ML and DL. Technologies: Deep learning, Python, RestAPI, Flask, Agile management
- ✧ **Customer service chatbot** in NAL (2017): Developed an automated Customer Service Representative for Thai Minh Group, leveraging machine learning and Text-To-Speech technologies. Technologies: Deep Learning, Text-to-Speech, Python, RestfulAPI, Flask, Linux, Docker, Agile Management.
- ✧ **Search-based NLP** in Otonhanh.vn (Startup Company - 2016): Contributed to automobile search platform using ML, NLP, and computer vision. Built accurate NLP algorithms for text classification and sentiment analysis. Technologies: ML, DL, Python, pandas, scikit-learn

PUBLICATIONS

- ✧ **Pham, V.T.,** Luu, H.P.H., Le Thi, H.A. (2022). *A Block Coordinate DCA Approach for Large-Scale Kernel SVM*. In: Nguyen, N.T., Manolopoulos, Y., Chbeir, R., Kozierkiewicz, A., Trawiński, B. (eds) Computational Collective Intelligence. ICCCI 2022. Lecture Notes in Computer Science(), vol 13501. Springer, Cham.
- ✧ **Pham, V.T.,** Le Thi, H.A., Luu, H.P.H., Damel, P. (2023). *DCA-Based Weighted Bagging: A New Ensemble Learning Approach.* In: Nguyen, N.T., et al. Intelligent Information and Database Systems. ACIIDS 2023. Lecture Notes in Computer Science(), vol 13996. Springer, Singapore.
- ✧ **Pham, V.T.,** Le Thi, H.A. and Pascal, D., 2023, *Cost-sensitive weighted bagging DCA based method for imbalanced financial data*. Submitted, **Submmited** In: Proceedings of the 4th International Conference and Summer School on Numerical Computations NUMTA.

LANGUAGES

English: Professional **French:** Elementary **Vietnamese**: Native

HOBBIES

Running/Football Reading/Learning Taking care of family