# Duc-Anh Nguyen





#### EDUCATION

#### VNU University of Engineering and Technology

Sep 2019 - Jul 2023

Bachelor of Science (Honors) in Information Systems

Hanoi, Vietnam

- Cumulative GPA: 3.61/4.
- Thesis: Combining GAN-based Data Augmentation and Pseudo-label Refinement with Holistic features for enhancing Unsupervised person re-identification, Supervised by Assoc. Prof. Ngoc-Hoa Nguyen, MSc. Hai-Dang Pham

### SKILLS

Programming languages Familiar with MLOps technology Have knowledge of

Python, C++.

Pytorch, Tensorflow, Docker, AWS services, Airflow, Multiprocessing. Database(SQL/NoSQL), Graph, Restful API, Big Data(Kafka, Spark), Data Analysis (Pandas, Numpy), EDA, Data Visualization (Matplotlib, PowerBI).

## Work Experience

**HEYHI** Singapore

AI Engineer

April 2023 - present

- Research solutions for digital transformation and adaptive learning in Education such as Pdf OCR, Knowledge Tracing, Knowledge graph, LLM and Recommendation System.
- Work with various DL architectures such as Yolo, Dert, Transformer/Attention-based model,...
- Deploy, Optimize and Maintain ML models, request processing pipelines on Cloud services such as AWS lambda, AWS S3.

#### VNU University of Engineering and Technology

Hanoi, Vietnam

Assistant Lecturer

Aug 2023 - present

- Provided support for teachers in many crucial courses such as Databases, Computer Architecture, and Project Management, then planned and implemented practical sessions.
- Partnered with teachers to plan and implement lessons following the school's curriculum, goals, and objectives.

Undergraduate Student Researcher

Jan 2022 - Jul 2023

- Under mentorship by Assoc. Prof Hoa Nguyen Ngoc at the faculty, our team study problem in face recognition, person tracking and generative AI.
- Analyze, conduct experiments, evaluate the suggested solutions and write multiple scientific papers
- Awarded First prizes from the Faculty of Information and Technology and VNU University of Engineering and Technology and our result is public in 1 journal Q1 and 3 conference.

#### Computer Vision Engineer Intern

May 2022 - Oct 2022

NAUTILUS TECH ., JSC

Hanoi, Vietnam

- Research solutions based on machine learning for AI Camera problems as Object detection, Tracking, Person ReID, Unsupervised learning.
- Performed requirements analysis on product new features and collaborated with BA and Dev teams in the product development process (Scrum).

#### HONORS AND AWARDS

1st Prize - VNU University of Engineering and Technology Student Scientific Conference 2023

Typical Student of Year Awards, VNU University of Engineering and Technology Student Scientific Conference 2022

Excellent Student Awards, University of Engineering and Technology, Vietnam National University in 2020, 2021, 2022, 2023.

# SELECTED PUBLICATIONS

- Anh D. Nguyen, Dat T. Nguyen, Hanh P. Du, Hai N. Dao, and Hoa N. Nguyen (Dec. 2022). "EnsFace: An Ensemble Method of Deep Convolutional Neural Networks with Novel Effective Loss Functions for Face Recognition". In: The 11th International Symposium on Information and Communication Technology. DOI: 10.1145/3568562.3568638.
- Anh D. Nguyen, Dat T. Nguyen, Hai N. Dao, Hai H. Le, and Nam Q. Tran (Dec. 2022). "Impact Analysis Different Effective Loss Functions By Using Deep Convolutional Neural Network For Face Recognition". In: *The 24th International Conference on Asian Digital Libraries, ICADL 2022*. Berlin, Heidelberg. DOI: 10.1007/978-3-031-21756-2\_8.
- Du, Hanh P., **Anh D. Nguyen**, Dat T. Nguyen, and Hoa N. Nguyen (Mar. 2023a). "A Novel Deep Ensemble Learning to Enhance User Authentication in Autonomous Vehicles". In: *IEEE Transactions on Automation Science and Engineering (T-ASE)*. DOI: 10.1109/TASE.2023.3270764.
- (2023b). "PEWFace: Parallel ensemble of weighted deep convolutional neural networks with novel loss functions for face-based authentication". In: *Image and Vision Computing* 139, p. 104819. ISSN: 0262-8856. DOI: https://doi.org/10.1016/j.imavis.2023.104819.
- Anh D. Nguyen, Dang H. Pham, and Hoa N. Nguyen (2023). "GAN-Based Data Augmentation and Pseudo-label Refinement for Unsupervised Domain Adaptation Person Re-identification". In: Computational Collective Intelligence. Cham: Springer Nature Switzerland, pp. 591–605. ISBN: 978-3-031-41456-5.

#### References

#### Assoc. Prof. Dr. Nguyen Ngoc Hoa

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