(+49) 15259817762
Dresden, Germany
minhducddd@gmail.com

Minh Duc Nguyen

AI Researcher

Google Scholar
github.com/mducducd
linkedin.com/in/mducducd

Education

M.S. in AI Convergence (Computer Science) Mar 2025
Chonnam National University, South Korea GPA: 4.36/4.50

B.S. in Computer Science Sep 2021
Vietnam National University – University of Engineering and Technology, Vietnam GPA: 3.05/4.00
Thesis: Artificial Intelligence System for Identifying Airport Passengers (Score: 9.2/10)

Experience

Computer Scientist **Aug 2025 — Present**
Else Kröner Fresenius Center for Digital Health (EKFZ), TU Dresden, Germany

- Creating explainable deep learning pipelines for biomedical data analysis and clinical decision support systems.
- Developing and deploying LLM agents for clinical applications with open-source models.

Research Graduate Student **Mar 2023 — Mar 2025**
Smart Computing Lab, Chonnam National University, South Korea

- Researched multimodal representation learning and generative modeling for dyadic facial reaction generation.
- Investigated medical image analysis and multimodal recognition frameworks.
- Developed a multi-scale facial emotion recognition model for pediatric video data.
- Designed an LLM-based clinical simulation framework for controllable patient-case generation.

Research Assistant **Jul 2021 — Jan 2023**
Human-Machine Interaction Lab, VNU University of Engineering and Technology, Vietnam

- Contributed to a government-funded project on AI-based reconstruction of historical woodblocks.
- Proposed a 2D–3D registration algorithm aligning character images with point cloud meshes [Paper].
- Developed point cloud refinement and upsampling methods for 3D reconstruction.

AI Engineer **2020 — 2022**
FPT Software & Hyperlogy Corp., Vietnam

- Developed 3D point cloud semantic segmentation models for industrial defect detection (enhanced Point Transformer).
- Implemented OCR, face verification, and multimodal identity recognition systems.

Assisstant **2019**
Revotech Lab *VNU University of Engineering and Technology, Vietnam*

- Developed a PixiJS-based scientific data visualization web tool.

Publications

International Peer-Reviewed Conferences & Journal

MD Nguyen, HJ Yang, SH Kim, S Kim, JE Shin. **Latent Behavior Diffusion for Sequential Reaction Generation in Dyadic Setting.** *ICPR 2024 (Top 10%)*. [Link]

MD Nguyen, HJ Yang, NH Ho, SH Kim, S Kim, JE Shin. **Vector Quantized Diffusion Models for Multiple Appropriate Reaction Generation.** *IEEE FG 2024*. [Link]

MD Nguyen, HJ Yang, SH Kim, S Kim, JE Shin. **Dual-Stream Transformer for Pain Assessment via Visual–Physiological Modeling.** *PeerJ Computer Science, 2025*. [Link]

QV Nguyen†, **MD Nguyen**†, THS Vo, HJ Yang, SH Kim. **Anatomical Attention Alignment for Radiology Report Generation.** *IEEE ICIP 2025*. [Link]

Other Conferences

Transformer with Leveraged Masked Autoencoder for Video-based Pain Assessment. *BIGDAS 2024*.

Leveraging WaveNet for Dynamic Listening Head Modeling from Speech. *MITA 2024*.

Document-based LLaMA-2 Chatbot for Medical Diagnosis. *KSIM 2024*.

Multiple Listener Facial Generation via Variational Autoencoder. *KCSE 2023*.

Awards and scholarships

Chonnam National University Scholarship (Outstanding academic performance) 2023–2024
Best Paper Award – BIGDAS 2024
Outstanding Short Paper Award – KCSE 2023
Gold Prize – Generative AI Hackathon (LLM-based multimodal chatbot with talking-face synthesis.) 2023
Third Prize – Vietnam National Olympiad in Informatics (Regional) 2015

Skills

Programming	Python, C/C++, Bash
ML Frameworks	PyTorch, HuggingFace, CUDA
Research Areas	Diffusion models, multimodal learning, vision-language modeling
Systems	Linux, Docker, Git
Languages	English (IELTS 6.5), Vietnamese

References

Prof. Dr. med. Jakob N. Kather
Professor of Clinical Artificial Intelligence, TU Dresden (EKFZ), University Hospital Dresden, NCT Dresden/Heidelberg, Germany
kather.jn@tu-dresden.de

Prof. Hyung-Jeong Yang
Department of AI Convergence, Chonnam National University, South Korea
hjyang@jnu.ac.kr

Assoc. Prof. Thanh Ha Le
Faculty of Information Technology, VNU-UET, Vietnam
ltha@vnu.edu.vn

Dr. Ngoc-Huynh Ho
Biggs Institute, UT Health San Antonio, USA
hon3@uthscsa.edu