Le-Anh Tran, PhD

Research Scientist

Computer Vision & Deep Learning

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Google Scholar

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ABOUT ME -

Al Research Scientist with 7+ years of experience in academia and industry, specializing in developing advanced algorithms and solutions for image enhancement, cluster analysis, and object detection. Proficient in Python and frameworks such as Tensorflow, Pytorch, and Conda. Published multiple research papers in peer-reviewed AI/ML-related journals and conferences. A collaborative team player with a strong passion for advancing AI-driven technologies, including computer vision, language models, and other cutting-edge innovations.

EDUCATION -

PhD in Electronics Engineering (Computer Vision) 3/2021 - 2/2024

Myongji University (Natural Science Campus), South Korea

3/2019 - 2/2021 **MSc in in Electronics Engineering (Computer Vision)**

Myongji University (Natural Science Campus), South Korea

BEng in Automation and Control Engineering (Graduated with Honors) 9/2014 - 8/2018

HCMC University of Technology and Education (HCMUTE), Vietnam

EXPERIENCE

4/2020 - 5/2025 Al Research Scientist

MindinTech, Inc., Seoul, South Korea

Researched and developed vision-based techniques for advanced driver-assistance systems

3/2019 - 2/2024

Intelligent Computing Research Lab (ICRL), Myongji University, South Korea

Researched and developed cutting-edge algorithms for image enhancement and cluster analysis

Software Development Intern 7/2019 - 9/2019

OCST Co., Ltd., Seoul, South Korea

Developed a software system for object detection streaming and data management

3/2018 - 2/2019 Al Engineer

FPT Software, Ho Chi Minh City, Vietnam

Developed and implemented vision-based algorithms for the first piloted driver-less car in Vietnam

2/2017 - 1/2018 **Teaching Assistant**

Faculty of Electrical and Electronics Engineering, HCMUTE, Vietnam

Assisted the lecturer during classes, prepared lesson plans, and evaluated assignments

EXPERTISE

- Programming: Python, Conda, Darknet, Tensorflow, Keras, Pytorch
- Document Presentation: MS Word, MS PowerPoint, LaTeX
- Technical: Statistical Analysis, Visualization, Technical Reporting, Problem Solving, etc.
- Concept: Knowledge Distillation, Knowledge Transfer, Learning without Forgetting, Dark Channel Prior, Non-Maximum Suppression, Vision Transformer, Generative Adversarial Networks, etc.
- Languages: Vietnamese (native), English (proficient)

Services

- Blog Writing: Towards Data Science · Level Up Coding
- Peer Reviewing: IEEE Transactions on Image Processing · IEEE Transactions on Intelligent Transportation Systems · Biomedical Signal Processing and Control · Sensors · Electronics · Supercomputing · Scientific Reports · The Visual Computer · International Journal of Machine Learning and Cybernetics

PUBLIC	ATIONS
lournal	Article

Journal Articles (†: equal contribution)

2025 Distilled Pooling Transformer Encoder for Efficient Realistic Image Dehazing

LA Tran, DC Park

Neural Computing and Applications (SCIE)

2025 Global Saturation-Value Translation Approach for Haze Removal in Urban Aerial Imagery

TD Do[†], LA Tran[†], J Lee, SK Hong

IEEE Access (SCIE)

2024 Drone-view Haze Removal via Regional Saturation-Value Translation and Soft Segmentation

TD Do[†], LA Tran[†], S Moon, J Chung, NP Nguyen, SK Hong

IEEE Access (SCIE)

2024 Lightweight Image Dehazing Networks based on Soft Knowledge Distillation

LA Tran, DC Park

The Visual Computer (SCIE)

2024 Encoder-Decoder Networks with Guided Transmission Map for Effective Image Dehazing

LA Tran. DC Park

The Visual Computer (SCIE)

2024 Cluster Analysis via Projection onto Convex Sets

LA Tran, D Kwon, HM Deberneh, DC Park

Intelligent Data Analysis (SCIE)

2025 Unpaired Image Dehazing via Kolmogorov-Arnold Transformation of Latent Features

LA Tran Under Review

2025 Improved U-Net with Identity Transformer Encoder for Efficient UAV Semantic Segmentation

TD Do[†], LA Tran[†], J Lee, SK Hong

Under Review

Conference Proceedings (†: equal contribution, §: corresponding author)

2025 Low-Light Enhancement via Encoder-Decoder Network with Illumination Guidance

LA Tran, CN Tran, NL Nguyen, NC Dang, J Carrabina, D Castells-Rufas, MS Nguyen IEEE International Conference on Computer and Communication Engineering (ICCCE)

2025 Spatial-Aware Image Denoising through an Encoder-Decoder Framework

TD Nguyen[†], LA Tran[†], G Cheol, ES Kim, KC Lee

Electronics, Semiconductor, and Artificial Intelligence Conference (IEIE, South Korea)

2025 Eye Side and Orientation Detection of Iris Images using Lightweight Textural Descriptors

NC Tran, J Carrabina, D Castells-Rufas, MS Nguyen, LA Tran, NC Dang

IEEE International Conference on Image Processing, Applications and Systems (IPAS)

2024 Clustering Optimization via Centroid Neural Network Ensemble

NC Tran, LA Tran[§], NP Le, J Carrabina, D Castells-Rufas, MS Nguyen, NC Dang

IEEE International Conference on Future Machine Learning and Data Science (FMLDS)

2024 POCS-based Image Compression: An Empirical Examination

TD Do[†], LA Tran[†], TD Nguyen, NN Truong, DC Park, MH Le

IEEE International Conference on Green Technology and Sustainable Development (GTSD)

2024 Toward Improving Robustness of Object Detectors against Domain Shift

LA Tran, NC Tran, DC Park, J Carrabina, D Castells-Rufas

IEEE International Conference on Green Energy, Computing and Sustainable Technology (GECOST)

2024 Single Image Dehazing via Regional Saturation-Value Translation

LA Tran, D Kwon, DC Park

Procedia Computer Science, Vol. 237

2023 Embedding Clustering via Autoencoder and Projection onto Convex Set

LA Tran, TD Nguyen, TD Do, NC Tran, D Kwon, DC Park

IEEE International Conference on System Science and Engineering (ICSSE)

2023	Efficient Infrared-Thermal Imaging Fusion for Human Detection in Heavy Smoke Scenarios NN Truong, MH Le, TD Do, LA Tran, TD Nguyen, HH Trinh IEEE International Conference on System Science and Engineering (ICSSE)
2023	Encoder-Decoder Network with Guided Transmission Map: Robustness and Applicability LA Tran, DC Park Smart Innovation, Systems and Technologies, Vol. 333
2022	Encoder-Decoder Network with Guided Transmission Map: Architecture LA Tran, DC Park International Conference on Advances in Signal Processing and Artificial Intelligence (ASPAI)
2022	POCS-based Clustering Algorithm LA Tran, HM Deberneh, TD Do, TD Nguyen, MH Le, DC Park IEEE International Workshop on Intelligent Systems (IWIS)
2022	Encoder-Decoder Network with Guided Transmission Map for Image Dehazing LA Tran, S Moon, DC Park Procedia Computer Science, Vol. 204
2021	Enhancement of Robustness in Object Detection Module for ADAS LA Tran, TD Do, DC Park, MH Le IEEE International Conference on System Science and Engineering (ICSSE)
2020	Object Detection Streaming and Data Management on Web Browser LA Tran Technical Report, OCST Co., Ltd.
2019	Robust U-Net-based Road Lane Markings Detection for Autonomous Driving LA Tran, MH Le IEEE International Conference on System Science and Engineering (ICSSE)
2018	A Vision-based Method for Autonomous Landing on a Target with a Quadcopter LA Tran, NP Le, TD Do, MH Le IEEE International Conference on Green Technology and Sustainable Development (GTSD)
2025	MetaFormer-driven Encoding Network for Robust Medical Semantic Segmentation LA Tran Under Review