Tran, Le Anh (1996)

"Once the WHY is clear, the HOW goes easy"

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ABOUT ME -

I completed my PhD under the guidance of Prof. Dong-Chul Park in early 2024, marking an important milestone in my research journey. I specialize in **Python** programming and have experience with various frameworks such as **tensorflow**, pytorch, conda, etc. My publications have mainly revolved around image enhancement, cluster analysis, and object detection. I am also a writer for popular Medium publications such as Towards Data Science, Level Up Coding, etc.

EDUCATION -

3/2021 - 2/2024 PhD in Computer Vision

Myongji University (Natural Science Campus), South Korea

3/2019 - 2/2021 **MSc in 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 - 2/2024 Research Staff Member (Part-time)

MindinTech, Inc., Seoul, South Korea

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

Research Assistant 3/2021 - 2/2024

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

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

in around 20 research publications

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

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

Faculty of Electrical and Electronics Engineering, HCMUTE, Vietnam

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

EXPERTISE

Skills

- 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)

Activities

- IEEE Member
- IEEE Young Professional
- Reviewer for Intelligent Data Analysis (IOS Press)

PUBLICATIONS —	
2024	Encoder-Decoder Networks with Guided Transmission Map for Effective Image Dehazing LA Tran, DC Park The Visual Computer, Springer (SCIE)
2024	Cluster Analysis via Projection onto Convex Sets LA Tran, D Kwon, HM Deberneh, DC Park Intelligent Data Analysis, IOS Press (SCIE)
2024	Toward Improving Robustness of Object Detectors against Domain Shift LA $Tran^{\nabla}$, NC $Tran^{\nabla}$, DC Park, J Carrabina, D Castells-Rufas IEEE International Conference on Green Energy, Computing and Sustainable Technology (GECOST)
2023	Single Image Dehazing via Regional Saturation-Value Translation LA Tran, D Kwon, DC Park Procedia Computer Science
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)
Under Review	Efficient Big Data Analysis via POCS and Centroid Neural Network LA Tran, DC Park
Under Review	Distilled Pooling Transformer Encoder for Efficient Realistic Image Dehazing LA Tran, DC Park
Under Review	Haze Removal via Regional Saturation-Value Translation and Soft Segmentation LA Tran, DC Park
Under Review	Soft Knowledge-based Distilled Dehazing Networks LA Tran, DC Park

POCS-based Image Compression: An Empirical Examination TD Nguyen $^{\nabla}$, LA Tran $^{\nabla}$, TD Do, DC Park Under Review

Clustering Optimization via Centroid Neural Network Ensemble NC Tran $^{\nabla}$, LA Tran $^{\nabla}$, DC Park, J Carrabina, D Castells-Rufas **Under Review**

A Thermal Imaging-based Search and Rescue System for Flying Robots in Firefighting TD Do, TD Nguyen, LA Tran, NN Truong **Under Review**

 $\nabla\!\!:$ equal contribution