# Tran, Le Anh (1996)

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

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## ABOUT ME

I completed my PhD 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

**9/2014 – 8/2018** — **BEng in Automation and Control Engineering (graduated with honors)**
HCMC University of Technology and Education (HCMUTE), Vietnam

## EXPERIENCE

**4/2020 – Present** — **Research Staff Member**
MindinTech, Inc., Seoul, South Korea
*Researching and developing vision-based techniques for advanced driver-assistance systems*

**3/2021 – 2/2024** — **Research Assistant**
Intelligent Computing Research Lab (ICRL), Myongji University, South Korea
*Researched and developed cutting-edge algorithms for image enhancement and cluster analysis*

**7/2019 – 9/2019** — **Software Development Intern**
OCST Co., Ltd., Seoul, South Korea
*Developed a software system for object detection streaming and data management*

**3/2018 – 2/2019** — **AI 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

### 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
- Journal Reviewer: Transactions on Image Processing (IEEE), Transactions on Intelligent Transportation Systems (IEEE), Intelligent Data Analysis (IOS Press)

## PUBLICATIONS

**2024**     **POCS-based Image Compression: An Empirical Examination**
TD Do$^\nabla$, LA Tran$^\nabla$, TD Nguyen, NN Truong, DC Park, MH Le
IEEE International Conference on Green Technology and Sustainable Development (GTSD)

**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)

**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)

**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

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

$\nabla$: equal contribution