# KHOA VAN TRAN

in Linkedin Github

Google Scholar

▼ khoatranrb@gmail.com

https://khoatranrb.github.io/

#### **OVERVIEW**

- I'm student and researcher about Machine/Deep Learning at University of Engineering and Technology, Vietnam National University. My interest research topic is Machine learning theory. I'm on my way to finding my specific research field. I'm currently learning Optimization and Machine learning probabilistic models.
- Visit my blog at https://khoatranrb.github.io if you are interested about Mathematics and Machine Learning.

## **EDUCATION**

University of Engineering and Technology - Vietnam National University, Hanoi Sep. 2018 - present Bachelor of Engineering in Robotics Engineering Hanoi, Vietnam

#### EXPERIENCE

**EASTGATE** Software August 2020 – present

AI Engineer Intern

Hanoi, Vietnam

- Object Detection: Work with many Object detection models: Yolo, WPODNet, SSD, CenterNET etc.
- OCR: Collect data, build model to detect text (CRAFT, segment model, ...) and do experiment in recognize phase to improve performance of pretrained model (CRNN, Tesseract, etc).
- Image Processing: use some algorithm like Hough line transform, Feature matching, 2D discrete Fourier transform to process and analyze image.
- Information extraction: Clear and label data. Build model (Named entity recognition, Question Answering, graph computation model) to extract information of documents, invoices.

#### AIGO - We make AI works

January 2020 - March 2020

AI Engineer Intern

Hanoi, Vietnam

- Study about Convolution Neutral Network, build Deep Learning pipeline for Image classify task and build AI web app with Dash framework under the lead of Dr. Tran Quoc Long.
- Use Haar Cascade on OpenCV for Face detector task.

### RESEARCH EXPERIENCE

UET-AI lab September 2019 – present

AI Researcher

Hanoi, Vietnam

Hanoi, Vietnam

- Research under the lead of Dr. Tran Quoc Long.
- Image Enhancement and Image Quality Assessment:
  - \* Implement state-of-the-art models and evaluate on benchmark datasets. Develop differentiable function to extract some special feature image.
- Representation Learning:
  - \* Research about multi-class representation and one-class representation.

AI Researcher

\* Research about Natural Language Understanding and Dialogue System Tracking.

## AI Vietnam Online Lab

February 2020 - December 2020

- Research under the lead of Dr. Dinh Quang Vinh.
- Research topics:
  - \* Image Enhancement
  - \* Research about multi-class representation and one-class representation.
- Research results:
  - \* A paper has accepted at The 9th International Conference on Smart Media and Applications (SMA 2020).

# RESEARCH PUBLICATIONS

• End-to-end Deep Network for Image Denoising and Colorization.

Khoa Tran Van, Vinh Dinh Quang, Phuc Nguyen Hong, Narayan Debnath C, Tuan-Duc Nguyen, Chang Wook Ahn. The 9th International Conference on Smart Media and Applications (SMA 2020).

# **SKILLS**

## Knowledge base:

- Mathematics: Statistics, Linear Algebra.
- Computer Vision: Object detection, OCR, GAN, etc.
- Natural Language Processing: Named entity recognition, Question Answering, Machine translation, etc.

## **Programming:**

- Python: Tensorflow, Pytorch, etc.
- C/C++.