NGOC-TRAM NGUYEN

AI Engineer

@ tramnnt.139@gmail.com   📞 (+84) 385550901   📍 Ho Chi Minh City, Viet Nam

in https://www.linkedin.com/in/ntrami   🐙 https://github.com/ntrami   🔗 https://ntrami.github.io

EXPERIENCE

AI Engineer
Got It

📅 Oct 2024 – Now   📍 Ho Chi Minh City, Viet Nam

- **Scan it Solution**
  - Collecting, processing, and synthesizing data (over 100+ bill templates from various retail sectors, including CVS, supermarkets, and electronics stores) for AI model training.
  - Developing and optimizing OCR models with 95% accuracy in document recognition.
  - Enhancing data extraction pipelines using AI-powered Intelligent Document Processing (IDP). Improving bill processing speed by 20x, enabling real-time data collection and analysis.

AI Researcher
AISIA Research Lab

📅 Dec 2022 – Now   📍 Ho Chi Minh City, Viet Nam

- **Video Retrieval System**
  - Processes text queries to identify and retrieve relevant frame videos from a large dataset.
  - Implementing the CLIP model architecture.
  - Stored feature vectors and applied a search algorithm to match the top frames' ID similarity with the text queries.

- **Developing an Early Action Recognition System**
  - Developing a deep learning model to predict human actions in videos from short snippets (10-90% observed).
  - This system has potential applications in traffic accident warnings, patient healthcare monitoring, and other real-time scenarios.

- **Developing Radar Waveform Classification Model**
  - Researched paper about waveform classification in radar communication systems to design a novel deep-learning architecture.
  - Preprocessed radar data by generating 12 unique signal representations using MATLAB.
  - Implemented and optimized a deep learning model for robust classification under varying signal-to-noise ratios (SNRs).

AI Engineer
Emage Development Co.Ltd

📅 Jan 2020 – June 2020   📍 Ho Chi Minh city, Viet Nam

- Implemented image pre-processing and post-processing techniques (OpenCV) to enhance the accuracy of deep learning models for semiconductor defect classification.
- Developed an automated labeling algorithm (Python) integrated into a labeling application, achieving a processing speed of 0.02 seconds per click.
- Designed and trained cutting-edge deep learning and machine learning models for robust classification of semiconductor defects.

SKILLS

Coding: Tensorflow, Pytorch, OpenCV, Scikit-Learn, Python

Data Analysis: Python, SQL

Cloud: AWS (AuroraDB, EC2)

Distributed Computing: Docker, Slurm, Bash scripting, Linux (GPU usage)

EDUCATION

Faculty Of Mathematics And Computer Science
Ho Chi Minh University Of Science, Vietnam National University Ho Chi Minh City

📅 April 2021

- GPA: 7.6/10.0

Master Program in Computer Science
Ho Chi Minh University Of Science, Vietnam National University Ho Chi Minh City

📅 December 2021 - Now

- Thesis: Developing an Early Action Recognition System
- GPA: 8.2/10.0

AWARD

- **The First Price in Developer Circles Vietnam Innovation Challenge.**
  Organizers: Facebook & Coder School
  Description: Fraud detection on identification cards. It supports staff to speed up their validation process.
  - OCR: get information from ID card (Google Cloud Vision API).
  - Face comparison: compare the face on the ID card and that on the selfie photo (Amazon Rekognition – AWS).
  - Document template check: validate the template (Template Matching – OpenCV)

REFERENCES

PhD. Tran Anh Tuan

✉ tuanta@vtc.edu.vn

📞 0364573441

AI Team Leader at Emage Development Co.Ltd