Nguyễn Tấn Khang

Hồ Chí Minh City, Vietnam

(+84) 796 176 302 | ntkhang2003@gmail.com | ntkhang2003 | khangnguyen2003

Summary

Highly motivated and technically proficient individual with a passion for leveraging data-driven insights to solve complex problems. Possess strong skills in data pipelines, machine learning, and programming. Eager to apply theoretical knowledge in a practical setting to contribute effectively to data-driven projects. Seeking an internship opportunity to further develop skills and gain hands-on experience in the field of data science, data engineering, or AI engineering.

Education

University of Information Technology - VNUHCM *HCMC, VN*

Bachelor of Computer Science *Sept 2021 - Current*

Current GPA: 3.42/4.0

Skills

Web development	HTML, CSS, Flask.
Database	SQL (MySQL, MSSQL Server), NoSQL (MongoDB).
Frameworks & Libraries	Tensorflow, Pytorch, OpenCV, Sklearn, Selenium, Streamlit, PySpark, Kafka.
DevOps	Docker, Ubuntu server.
Language	English (IELTS 6.5).

University Projects

License Plate Recognition

Leader, Researcher

- **Project Description:** Developing a system to extract text from license plate via images/videos.
- Train YOLOv8 on custom dataset and use the pretrained model WPOD-NET to detect license plate.
- Train SVM, kNN model to classify characters from license plate cropped image.
- Use Streamlit/Flask to provide demo.

Vietnamese Handwritten OCR

Leader, Researcher

- **Project Description:** Building models to extract text from Vietnamese handwritten images.
- Generate images to enrich dataset by using handwritten fonts.
- Implement CRNN architecture and use VietOCR library to train and infer OCR model.

Real-time Credit card Fraud Detection

Leader, Researcher

- **Project Description:** Developing a system to detect fraud transaction in real-time.
- Apply SparkSQL to interact with large amount data in MySQL database.
- Train Decision Tree, SVM model with SparkML.
- Stream big data by using Kafka and do real-time prediction.

Image-based Pneumonia Detection

Leader, Researcher

- **Project Description:** Building models for predicting whether pneumonia or normal via X-ray images.
- Apply computational thinking process for problem solving.
- Extract deep features with VGG19 and EfficientNetB2.
- Use ML models such as SVM, kNN, Naive Bayes, Random Forest to classify images.
- Use Gradio to provide demo.

DGA-based Botnets and DNS Homographs Detection through Integrated Deep Learning

Leader, Researcher

- **Project Description:** Experimenting proposed models from scientific paper.
- Implement S-CNN, S-LSTM, S-GRU, S-B-LSTM, S-B-GRU to calculate similarities between two domain names.
- Implement LSTM, GRU, CNN, CNN-LSTM, B-LSTM, B-GRU to classify DGA domains.

Achievements

2022 **3rd Semester**, UIT Academic Encouragement Scholarship

Certifications

2023 **Problem Solving Using Computational Thinking**, University of Michigan

Activities

Communist Youth Union of Computer Science Faculty *HCMC, VN*

Member of The Executive Committee *2021 - Present*

Organizing Commitee:

- Trainee Program - a program training for freshman of UIT.
- Wecode Challenge - a coding challenge for freshman of UIT in Wecode online judge.
- UCPC - an ICPC-like competitive programming contest by the Computer Science Faculty.