TRUONG-PHAT NGUYEN

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GitHub

RESEARCH INTERESTING

I am a first-year Master's student at Ho Chi Minh City University of Industry and Trade, majoring in Information Technology. I previously earned my Bachelor's degree in Information Technology with a focus on Data Science from the same university. My research interests include computer vision, machine learning, system optimization, and the application of models. I am also strongly interested in data exploration and designing and building websites.

EDUCATION

Ho Chi Minh City University of Industry and Trade, Bachelor in Information Technology - Data Science — Sep 2020 – May 2024

- **Graduate thesis:** Building human action recognition applications
- **Specialized project score**: 9.0/10
- **Relevant Coursework**: Statistical Probability, Linear Algebra, Machine Learning, Data Mining, Data Analysis and Forecasting, Deep Learning

EXPERIENCE

Software Engineer, New Tech Solutions – Ho Chi Minh City, Viet Nam — Apr 2024 – Sep 2024

- Participated on the Web Development Taskforce to provide AngularJS sites to internal customers.
- Developed and maintained websites using ASP.NET, focusing on back-end development and API
- Use Postman to test API, performing testing and debugging to ensure product quality

Data Analyst - Remote, Financial Services Lenken – Ha Noi, Viet Nam — Mar 2024 – Aug 2024

- Design and implement machine learning models using Python to enhance credit scoring accuracy and reliability
- Engage in researching, developing, and designing algorithms to assess and predict comprehensive customer risk profiles, particularly focusing on forecasting consumer behavior and spending habits.
- Design the flow for the database using Postgresql, storage facilities, and processing to maximize the information accessible from customers.

AI Intern, Hung Minh Group – Ho Chi Minh City, Viet Nam — Jul 2023 – Jan 2024

- Supported the business by accurately extracting and preprocessing data from websites.
- Addressed data mining challenges by tools by implementing users' behavior.
- Deliver high-quality data to aid business decision

RESEARCH

RESEARCH ON COMMUNITY DETECTION ALGORITHM IN SOCIAL NETWORK DATA – APPLICATIONS TO BUILD BIPOLAR DATA IN THE FORM OF BIPOLAR GRAPH — Feb 2024 – Aug 2024

The-Sang Do, Truong-Phat Nguyen, *Advise by:* **PhD.Bich-Ngan T. Nguyen**

- Research algorithms to detect for the community are Greedy Modularity and Directed Louvain.
- Build bipartite graphs applied to social network data and graph data construction process

PROJECTS

Web Crawler

- Crawled data from Facebook, and YouTube using a library of Python is Beautiful Soup and framework Selenium and Google API
- Optimize the algorithms TF-IDF, Linear Regression, and CountVectorizer to predict news trends on social networks.

- Create a user interface for analyzing data using Flask.
- Tools Used: Python, Matplotlib.

IoT Device Management Website

- Research and build a database using SQL for the website.
- The website provides real-time communication using an ASP.NET backend and AngularJS frontend.
- Build some features like adding, deleting, and editing products. User authorization and two-factor authentication feature.
- Managed source code and project by Git.
- Tools Used: C#, ASP.NET, Angular JS, GitHub.

Credit Risk Scoring System

- Develop a flow for the database, storage facilities, and processing to maximize the information accessible from customers.
- Research algorithms to evaluate and predict comprehensive customer risk profiles.
- Managed source code and project by Git.
- Tools Used: Python, Postgresql, GitHub.

Action-Recognition Website

- Research algorithm LSTM (Long Short-Term Memory), model RNN (Recurrent Neural Network), and using library MediaPipe of Google to action recognition
- Build the user interface for users using Streamlit.
- Tools Used: Python
- Framework Used: Streamlit.

Prediction and Classification of Brain Tumor github.com/brain_tumor

- Preprocessing and analyzing **Brain Tumor MRI Dataset** on Kaggle.
- Research models SVM (Support Vector Machine) and CNN (Convolutional Neural Network) to predict the tumor.
- It was determined that the SVM model exhibits higher accuracy compared to the CNN model.
- Tools Used: Python

HONORS, ACTIVITIES, AND AWARDS

3rd prize in the Student Scientific Research Competition — May, 2024

HUIT Encouraging Scholarship — Sem I, 2023/2024

Top 24 Vietnam Datathon 2023 Contest — Dec, 2023

3rd prize in the English Debate Competition about Information Technology — May, 2023

Certificate: Google Data Analytics Certificate, Google IT Automation with Python Certificate, Machine Learning Certificate - DeepLearning.AI from Google Coursera, **Google AI Essentials Certificate**

RESEARCH AND TECHNOLOGIES SKILL

Research Domain: Computer Vision, Optimization, Machine Learning.

Programming Languages: Python, C, Java, C#, SQL, JavaScript, TypeScript.

Languages: Vietnamese, English

Soft Skill: Problem-Solving, Teamwork, Communicate Skill

Technologies Skill: OpenCV, Numpy, Matplotlib, ASP.NET, Microsoft SQL Server.