# TRUONG PHAT-NGUYEN

phatnguyen3174.github.io | +84 798 699 203 | phatnguyen9712@gmail.com | Github | LinkedIn

#### **EDUCATION**

# Ho Chi Minh City University of Industry and Trade

Ho Chi Minh City, Vietnam

Bachelor in Information

Sep 2020 – May 2024

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

#### **WORK & EXPERIENCE**

# **New Tech Solutions**

Ho Chi Minh City, Vietnam

Software Engineer

Apr 2024 – Sep 2024

- Participated in 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
- Used Postman to test API, performing testing and debugging to ensure product quality

#### **Financial Services Lenken**

Remote - Ha Noi, Viet Nam

Data Analyst

Mar 2024 – Aug 2024

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

# **Hung Minh Group**

Ho Chi Minh City, Vietnam

AI Intern

Jul 2023 – Jan 2024

- Supported the business by accurately extracting and preprocessing data from websites, ensuring 90% of the data was precise
- Addressed data mining challenges with tools by implementing users' behavior.
- Delivered 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, Advised by: PhD.Bich-Ngan T. Nguyen

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

#### **PROJECTS**

# **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**

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

# Web Crawler

- Crawl 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.
- Provide 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.
- Manage 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.
- Manage source code and project by Git.
- Tools Used: Python, Postgresql, GitHub.

#### **SKILLS & CERTIFICATIONS**

Research Domain: AI, Machine Learning, Computer Vision, Optimization.

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

**Soft Skills:** Problem-Solving, Teamwork, Communication, Leadership, Critical thinking, Analytical Thinking

Technical Skills: OpenCV, Numpy, Matplotlib, ASP.NET, Microsoft SQL Server

**Certifications & Training:** Data Analytics Certificate (Google), IT Automation with Python Certificate (Google), Machine Learning Certificate - DeepLearning.AI (Coursera), AI Essentials Certificate (Google)

#### LANGUAGE

English (Intermediate), Vietnamese (Native)