

# TIEN PHAT BUI

## Education

**BACHELOR OF INFORMATION TECHNOLOGY**(Expected 05/2024) – Ho Chi Minh City Open University – 97 Vo Van Tan, Ward 6, District 3, Ho Chi Minh City  
GPA: 3.76/4.00 (Highest in Major)  
Majors: Information Technology  
Relevant Coursework: Machine Learning, Data Visualization and Communication, Database Systems and SQL, Natural Language Processing, Computer Vision, Deep Learning and Neural Networks

## Skills

<b>Python</b> Libraries and frameworks: pandas, matplotlib, numpy, BeutifulSoup4, re, os, scikit-learn, Hugging Face, transformers, PyTorch, Python-Flask, LangChain, NLTK	<b>Big Data</b> Apache Hadoop, PySpark  <b>SQL</b> Software: SQLite, MySQL, SQL, PostgreSQL	<b>Power Bi</b> Tools: Power Query, Visualize  <b>C++</b> Libraries: STL, Boot C++, Armadillo
---	---	---

## Projects

**LEGAL SEARCH AND RESPONSE PLATFORM** – Group competition project November 2023 - now

- Provides users with quick access to legal information, delivers reliable answers to legal queries, and enables efficient navigation through legal codes and documents
- Utilizes ReactJS for front-end development, employs **Python Flask** for back-end functionality, and enhances its capabilities with complementary integration tools such as CI/CD (Continuous Integration/Continuous Deployment) and Docker for streamlined deployment processes, ensuring efficient and reliable operation
- Project management, ensuring a waterfall system development process, data search and preprocessing, training **deep learning** models based on PhoBERT and **LangChain** for question-answering tasks for answering legal and training another model to classify "legal definition" sentences in legal documents, taking on the role of data designer using **MySQL**, and visualize the model training process for reporting using **matplotlib**
- Winning third prize in the Vietnam Student Informatics Olympiad - Open source competition, the project attracted the jury for its creativity and was considered to have the most potential. The product is open source code that is being invested in, developed and raised capital
- The article introduces the project: <https://fossa.vn/tin-tuc/code-heroes-nen-tang-tra-cuu-va-giai-dap-phap-luat-ung-dung-sang-tao-cac-mo-hinh-ngon-ngu-lon-698.html>

**AN AUTOMATICALLY ANSWERING ENGLISH AND VIETNAMESE READING COMPREHENSION SYSTEM** – Personal Project June 2021 - January 2022

- Assisting users in automatically answering Vietnamese or English reading comprehension questions by providing the system with a passage of information (provided by the user), from which the system extracts information to answer the user's queries
- Using Hugging Face as a model repository, we employ a BERT-based model for answering English reading comprehension questions and a PhoBERT-based model for answering Vietnamese reading comprehension questions. **Gradio** is utilized to design an interactive interface for user interaction
- Taking on the role of data preparation, I utilize available datasets and scrape data from the web using **BeautifulSoup4**. Data processing is performed using **Python**, while model fine-tuning is carried out through the use of **Transformers** and **PyTorch**. Model evaluation and visualization of evaluation results are conducted using **matplotlib**
- The English question-answering model achieved a significant 78% accuracy when applied to multiple-choice questions. The Vietnamese question-answering model also achieved an exact match accuracy of 72%

## OTHER PROJECT

- Online library
- Time management website
- Website for book sales management
- Vietnamese toxic comment classification

## Achievements and Awards

---

**THE 2022 ICPC ASIA HO CHI MINH CITY – HCMUTE–** Ho Chi Minh City December 2022

- Ranked among the top 260 / 470 teams in the ICPC Asia Regionals, showcasing **problem-solving skills** and **algorithmic proficiency**.

**THE 2023 ICPC ASIA HUE CITY –** Hue University Of Science– Hue City December 2023

- Third prize in the Vietnam Student Informatics Olympiad - Open source competition. Solution building project "Developing an application to support searching and asking questions about legal knowledge based on the Legal Code and Legal Document Database", applying and refining **LLMs** models to training chat-bot to answer legal questions

**THE 24H PROGRAMMING –** Ho Chi Minh City Open University – Ho Chi Minh City April 2023

- Champion of the 24h Programming Contest. Build an application that applies algorithms to suggest user habits using **machine learning** and visualize daily activities and consumption habits using **matplotlib**, helping users manage time and money

## Work Experience

---

**DATA ANALYST –** ISD CORP – Tan Binh, HCM City June 2023 - August 2023

- Created interactive dashboards and reports using **Power BI**, **matplotlib** to visualize and communicate data-driven insights to stakeholders
- Conducted data cleaning, preprocessing, and feature engineering to ensure data quality and accuracy. Utilized statistical analysis techniques and machine learning algorithms to develop predictive models for business forecasting
- Develop charts in the CRM system to evaluate the business performance of the enterprise. Proficient in using **SQL** techniques to query data, proficiently applying **matplotlib**, **Power BI** and **scikit-learn** machine learning techniques to enhance customers' decision making process
- Optimized data processing workflows, resulting in a 10% reduction in data processing time
- Developed a comprehensive customer segmentation model that improved targeted marketing campaigns and increased customer engagement

## Certification

---

### [DATA SCIENCE AND MACHINE LEARNING CERTIFICATES](#)

- Ho Chi Minh City University of Natural Sciences Informatics Center
- Certification Date: 2023
- Description: Helps master Python programming, use various tools and libraries for **data science** and **machine learning engineer**, apply **data preprocessing** techniques, implement **machine learning** algorithms to solve real problems economics, and work with **Big Data** technologies such as **Spark** and **PySpark**

### [ICPC PARTICIPATION CERTIFICATE](#)

- ICPC Foundation
- Certification Date: October 2022
- Description: The ICPC (International Collegiate Programming Contest) certificate is awarded to participants who have competed in the ICPC regional or world finals competitions. It serves as a recognition of their accomplishment and participation in this prestigious programming contest