# HIEU DUONG

### **EDUCATION**

**BACHELOR OF SCIENCE IN BUSINESS** | Missouri State University – Springfield, MO

Dec

2024

Major in Business Analytics

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY | Missouri State University – Springfield, MO

Dec

2026

**Data Analytics Focus** 

## **SKILLS**

**Programming Languages:** Python, R, SQL **Data Visualization:** Tableau, Power BI

**Certification:** Google Data Analytics Professional

Data Processing: Pandas
Database Management: MySQL
Cloud Technologies: AWS

### **WORK EXPERIENCE**

Machine Learning: NNSOA

**GRADUATE RESEARCH ASSISTANT** | Missouri State University – Springfield, MO

August 2024 – Dec 2024

- Developed and maintained an organized Excel database for Designated School Officials (DSOs), streamlining student record management and improving data accessibility.
- Designed data sorting and filtering mechanisms within Excel, enabling DSOs to quickly retrieve and analyze student information for compliance and reporting requirements.
- Collaborated with DSOs to customize Excel functionalities, optimizing the tool for their specific needs and reducing data processing time.

STUDENT WORKER | International Services Office – Springfield, MO

May 2022 - Present

- Enhanced data collection and management processes by implementing a centralized tracking system in Excel, improving access to student data and reducing data retrieval time.
- Designed and executed a data-driven approach for monitoring office metrics, resulting in a 20% increase in process efficiency and enabling targeted improvements in student support services.
- Analyzed international student engagement data to identify trends, providing insights that informed tailored communication strategies and improved service satisfaction scores by.

## **PROJECTS**

Political Forecasting: Predicting Voter Preferences Using Neural Networks | Missouri State University – Springfield, MO Dec 2023

- Built a neural network model (NNSOA) to classify voter preferences (Republican or Democrat) using 12 socio-demographic and behavioral inputs, achieving an average prediction error rate of just 2.2% with optimized hidden nodes.
- Applied normalization techniques and a 10-fold cross-validation approach to improve model accuracy and stability, resulting in a robust predictive framework for political forecasting.
- Conducted sensitivity analysis to identify key factors influencing voting behavior, providing insights that can support targeted campaign strategies based on influential variables like income, smoking, and property ownership.