


PHUONG ANH DINH

anhphuongdinh2003@gmail.com | (61) 452212203 | Sydney, NSW, Australia (Open for relocation)

 [LinkedIn](#)

 [GitHub](#)

[ORCID](#)

[Portfolio](#)

Education

High School for Gifted Students, Hanoi National University of Education Hanoi, Vietnam | Aug 2018 - June 2021

- **GPA:** 8.9 – Mathematics: 9.3 | Informatics: 9.4 | Technology: 9.5
- Programming Club

SP Jain School of Global Management Sydney, Australia | Sep 2021- May 2024

Bachelor of Data Science

- **CGPA:** 3.46/4
- Programming Club

RELATED COURSEWORK

- Python Programming, R, Deep Learning, Machine Learning, Neural Networks
- Data Structure and Algorithm, Database Systems, Data Warehouse, Big Data, NoSQL, Cloud Computing
- Calculus, Probability and Statistics, Discrete Mathematics, Linear Algebra

Skills

- **Programming:** Python, R, SQL, C#, JavaScript (Flask, HTML, CSS)
- **Machine Learning & AI:** TensorFlow, Scikit-Learn, OpenCV, Deep Learning, NLP, LLM (RAG, fine-tuning, Prompt Engineering)
- **Data Science & Analytics:** Power BI, Tableau, Pandas, NumPy, Hadoop, Spark, JMP-SAS, SPSS
- **Developer Tools:** Git, VS Code, Spyder, Jupyter Notebook, MySQL, Microsoft SQL Server, Google Colab, R studio, Linux

Experience

Data Scientist Aug 2024 - Now
Ingrity Sydney, Australia

- Designing and developed an **AI chatbot** using Azure services, integrating advanced **retrieval-augmented generation (RAG)** techniques, prompt engineering, and fine-tuning of models to enhance chatbot accuracy and response quality.
- Extracting, cleaning, and preprocessing **large unstructured datasets** using **Python, SQL**, and multiple **chunking** methods to optimize AI model training and deployment.
- Analyzing and monitor **data pipelines** using SQL, Power BI, Excel Pivot Tables, and Azure DevOps, ensuring smooth data flow, efficiency, and business intelligence reporting.
- Developing **interactive dashboards** and reports in Power BI to track key performance indicators (KPIs), detect anomalies, and drive data-driven decision-making.

AI Research Fellow (Volunteer – AI & Global Impact Initiative) April – Oct 2024
Boston Global Forum Vietnam- Remote

Link: [Organization Project Overview](#)

- Developed **AI** to educate global leaders, researchers, and citizens about politics, and **ethical AI applications (social for good)**.
- Extracted, processed, cleaned, and verified **large-scale text data** from legal and political sources
- Developed **high-quality** training datasets and applied state-of-the-art **machine learning, deep learning, and generative AI** techniques to enhance chatbot performance.
- Conducted rigorous model evaluation, **fine-tuning**, and **prompt engineering** to ensure factual **accuracy** and legal compliance.

Research Assistant Intern – Taiwan Experience Education Program Jun - September 2023
National Tsing Hua University - **Fully Funded Scholarship** Hsinchu, Taiwan

- Integrated **Azure Digital Twin** technology for smart city infrastructure optimization.
- Utilizing Azure Services, including **IoT Hub, Machine Learning, Stream Analytics**, etc., for real-time data insights & predictive analytics from smart city
- Designing and deploying **data pipelines** for efficient data flow.
- Focusing on enhancing the efficiency and performance of **wind turbines** in a smart city environment

Data Analyst Intern Feb - April 2022
Globalshala USA -Remote

- Gathered and organized data from the Facebook ad Campaigns, collaborating with the Marketing team.
- Produced data visualizations to aid the Finance team in understanding the performance of ad campaigns, helping them make informed decisions.
- Identified underperforming campaigns for potential discontinuation to optimize ad spending and cut costs.

Research Publication

1. Urban Digital-Twin Planning for Sustainable Smart Cities: System Architecture, Preliminary Experiments, and Open Challenges

2024

Associated with National Tsing Hua University

 [Published Paper](#)

- Digital Twin Potential: Exploring how DTs can transform smart cities with applications like air-quality-aware navigation and traffic management.
- Innovative Urban DT Planning: Introducing a scalable, interoperable DT architecture through modern middleware approaches, tested on platforms like Microsoft Azure , Amazon Services and Eclipse.
- Shaping the Future of Smart Cities: Highlighting open challenges to inspire research and adoption of sustainable DT-enabled urban solutions.

2. Enhancing Data Centers to Reduce High Energy Consumption

2023

Associated with SP Jain School of Global Management

 [Published Paper](#)

- Proposed sustainable and innovative solutions for enhancing Data Centers to lower its Energy Consumption rate by bringing up alternatives for the power-driven cooling systems in data centers.
- Analyzed environmental impacts of current infrastructure and highlighted energy efficiency challenges related to the rise of cloud computing.
- Presented future-oriented strategies to build greener, high-performance data centers, aligning with global sustainability goals.

Awards Achievement

1.The Top One Student - Valedictorian in the entrance exam to Thai Binh High School for Gifted Student

2018

2.Scholarship for Bachelor Program

2021

USA:

- Georgia State University - **100%** Out of State Tuition Waiver – 20000\$/Year
- Beloit College - **Presidential** Scholarship (Merit-based) - 49000\$/Year
- Augustana College – International **Merit Award** Scholarship – 37000\$/Year
- Miami University – University *Merit* Scholarship – 29000\$/Year

Australia:

- SP Jain School of Global Management – 85% Tuition Waiver Scholarship

Taiwan:

- Taiwan Experience Education Program – Research Internship - **Fully Funded** Scholarship

2023

3.Coding and AI Competition:

Major League Hacking Global Hack Week Data (Top 3% worldwide)

2025

- **Time series database:** Applied **time series** techniques on stock trading analysis
- **Open Data Use Case:** Performed comprehensive **data preprocessing**(exploratory data analysis, feature selection,..) and applied **ML techniques** (random forest, decision tree, svm, knn, etc..) to accurately predict users' mental states from real-world survey dataset (DASS-42)with **high accuracy (98%)**
- **Database Query Optimizer:** Leverage **artificial intelligence - GenAI** to create a system that analyzes SQL queries and suggests **optimization techniques** to reduce execution time and improve performance

VP Bank Technology Hackathon 2024 (Final Round - Top 3/46 Challenge 5| Top 18/136 Teams)

2024


Apply **AWS services** and **GenAI** technology in building the banking organization's chatbot application

- Developed an **AI-powered** Talent Acquisition Search Application, leveraging **AWS cloud services** and **generative AI models** to streamline CV processing and candidate selection.
- Implemented **Retrieval-Augmented Generation (RAG)** and **semantic search** to enhance candidate matching, utilizing Claude3, OpenAI embeddings, and Cohere rerank models.
- Collaborated in a cross-functional team to integrate **LLM-based** automated CV analysis, metadata extraction, and **SQL-based structured search** for efficient talent acquisition.
- Designed a scalable architecture with **AWS S3, Bedrock LLM, PostgreSQL (pgvector)**, and API Gateway, optimizing data retrieval and ranking processes.

Google Hash Code (Certified by Google)

2022

- Contribute to the team to develop and implement data structure and algorithm to solve the coding problems by Google

 **Ingrity Company** - Best Employee of Year – ‘OWN UP’ Living Our Value.

Projects

1, Mental Health Survey and Chatbot Therapy Website - (SDG Goal 3 – Good Health & Well-Being)

[Web App Link](#)

2024

- Developed an AI chatbot friend and therapist to support people with mental health conditions, aligning with United Nations Sustainable Development Goal (SDG) 3.
- Performed comprehensive data preprocessing (EDA, feature selection,..) and applied **ML techniques** (random forest, decision tree, svm, knn, etc..) to predict users' mental states from real-world survey dataset with high accuracy (98%)
- Created a dynamic user-friendly **Flask-based** website with HTML, CSS, and Javascript with real-time mental health assessment capabilities and **NLP-driven sentiment analysis**.
- Used **Plotly** for interactive **data visualization of global mental health trends** to enhance user engagement
- Implemented an AI-driven chatbot interface for personalized health support and therapy.

2, Diagnosing breast cancer using Machine Learning and Deep Learning Model

2022

- Pre-processed data using EDA to visualize and investigate data sets and summarize the main characteristics
- **Feature Engineering and PCA** reduces the dimensionality of datasets, increasing interpretability.
- Trained multiple **ML Models** (Logistic Regression, SVM) and DL model (ANN) for high accuracy classification

3, Drowsiness Detector with OpenCV (Computer Vision)

2021

- Built a real-time driver drowsiness detector using **OpenCV & Dlib** to help drivers for a safer journey
- **Fatigue level analysis** using 68-landmark detector data (.dat)
- Detect based on thresholds of sleeping, drowsy, active

Certification

- **Data Structure** from Coursera 2022
[Certificate Link](#)
- **Python** from Hackerrank 2021
[Certificate Link](#)
- **SQL (Intermediate)** from Hackerrank 2021
[Certificate Link](#)

Reference

- **Prof. Cheng Hsin Hsu**
Professor, Department of Computer Science, National Tsing Hua University (NTHU), Taiwan. Director of the Ambient Intelligence for Immersive Networked Systems (AIINS) Lab. His research focuses on multimedia systems, wireless networking, and mobile computing, with publications in top-tier venues such as ACM MobiCom, IEEE INFOCOM, and ACM Multimedia
Email: chsu@cs.nthu.edu.tw
- **Dr. Abhijit Dasgupta**
Associate Professor and Director at the Data Science department, SP Jain School of Global Management, Australia. Brings over two decades of experience bridging academia and industry in AI, analytics, and business transformation. Former CEO of a media analytics company and co-founder of an analytics startup in the San Francisco Bay Area
Email: abhijit.dasgupta@spjain.org