

PHAM PHU NGOC TRAI

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GitHub - LinkedIn

EDUCATION

FPT University, Ho Chi Minh City - GPA: 8.2/10

Sep 2020 - Dec 2024

- Major: Artificial Intelligence (100% Scholarship)

EXPERIENCE

AI Engineer

FPT Software

Jan 2023 - Present

Quy Nhon - Vietnam

Spearheaded the development of advanced AI solutions, including document and table extraction systems, multilingual invoice processing, and MRZ recognition, utilizing state-of-the-art models like YOLOv8 and YOLOv10 for high precision.

Designed and implemented robust pipelines for table reconstruction, face recognition, and antiquities inpainting, integrating deep learning and computer vision techniques with frameworks like PyTorch, PaddleOCR, and OpenCV.

Engineered scalable web and API-based applications for real-time deployment, leveraging Docker, FastAPI, and cloud platforms such as AWS and Google Cloud.

Applied Generative AI and large language models (LLMs) for innovative tools like resume ranking systems and intelligent chatbots, showcasing expertise in prompt engineering and natural language understanding.

Delivered production-ready solutions tailored for industries like HR, cultural preservation, education, and enterprise automation, significantly improving operational efficiency.

Published and maintained reusable tools, such as the **Table2HTML** Python package, enabling widespread adoption of AI-powered table extraction.

PROJECTS

LLM-Driven Calendar Chatbot on Google Cloud Platform

- Designed and implemented a multi-agent chatbot architecture using advanced Large Language Models (LLMs) to streamline calendar scheduling and task management.
- Led end-to-end system deployment on Google Cloud Functions, integrating seamlessly with Google Cloud Platform for scalable and secure operations.
- Engineered context-aware conversational flows to classify user intents, manage dynamic interactions, and autonomously gather scheduling details.
- Optimized performance through prompt engineering, delivering a robust and enterprise-ready AI solution for real-time scheduling automation.

Resume Ranking - JobFit

- Designed and applied prompt engineering techniques to extract structured information from resumes using large language models (LLMs) via OpenAI API.
- Automated tools call for efficient information extraction.
- Libraries & Frameworks: LangChain, PyPDF, Flask, OpenAI.
- Enhanced resume filtering for HR professionals.

TECHNICAL SKILLS

Programming Languages

Python (4 years), C++ (4 years)

Frameworks/Libraries

LangChain, PyTorch, Flask, OpenCV, YOLO, Transformers, Hugging Face

Cloud Platforms

AWS, GCP (Google Cloud Functions, Vertex AI), Azure

Tools

Docker, Git, CI/CD (GitHub Actions)

AI/ML Techniques

Multi-Agent Systems, Prompt Engineering, Tokenization, Semantic Search

ACHIEVEMENTS

Research Competition

- **First Prize** Research Festival 2023 at FPTU Ho Chi Minh (2023)

Programming Contests

- **Silver Medal** Trai He Phuong Nam (2018)
- **Silver Medal** "30th April" Olympic contest (2019)
- **First Prize** Provincial Excellent Student Award (2020)

University Achievements

- **100% Scholarship** FPT University (2020 - 2024)
- Honorable Student status in 4 Semesters (Summer 2022, Fall 2022, Spring 2023, Summer 2023)

Certificates

- Microsoft Certified: Azure Fundamentals (2024)
- NVIDIA Getting Started with AI on Jetson Nano (2024)
- Coursera Big Data Certificate (2023)
- Coursera IBM Full Stack Software Developer Certificate (2023)

Other Achievements

- **Best Mentor Award** FPT University Scholarship Hunter Association (2022)
- Microsoft Office Specialist Microsoft PowerPoint (2019)