LƯU TRỌNG DŨNG
AI Engineer Intern

Contact

Phone
0966231604

Email
trongdung143@gmail.com

Address
Di An Ward, Ho Chi Minh City

GitHub
github.com/trongdung143

Education

Ho Chi Minh City University of Technology and Education (HCMUTE)

- Major: Information Technology
- GPA: 3.19/4.00

Skills

- **Languages:** Python, C++, C#.
- **Frameworks and Libraries:** PyTorch, Scikit-learn, OpenCV, Torch, TensorFlow, LangChain, LangGraph, NumPy, matplotlib, pandas.
- Databases: MySQL, PostgreSQL (Supabase).
- **Tools:** Git, Docker.
- **Soft Skills:** Communication, Problem-Solving, Presentation, Teamwork, Self-Study, English.

CAREER OBJECTIVE

As a fourth year Software Technology student, I aspire to become an AI Engineer specializing in Natural Language Processing (NLP) and Computer Vision. I am seeking an internship opportunity to apply my skills in Python programming, machine learning, and deep learning to real world projects, while further enhancing my research and teamwork abilities, with the long term goal of building a successful career in Artificial Intelligence.

PROJECTS

AI Pathfinding Algorithm Simulation Project (2 member)   8/2024-12/2024

Role: AI Developer (Responsible for AI Integration)
Frameworks: Pygame, NumPy, Queue, Stack.
Description:

- Designed and implemented pathfinding algorithms: A*, Beam Search, BFS, DFS, Greedy, Hill Climbing, and Uniform Cost Search (UCS).
- Built an interactive simulation platform to visualize algorithm execution, pathfinding results, and compare performance across algorithms.
- Leveraged Pygame for graphical visualization and step-by-step execution tracing.

Repository: github.com/trongdung143/ai-search-algorithms

Learning with AI Platform (Team Project – 5 members)   1/2025-5/2025

Role: AI Developer (Responsible for AI Integration)
Frameworks: LangChain, Together API, FastAPI, TensorFlow, Sentence Transformers, FAISS.
Description:

- Built a semantic search system with Sentence Transformers + FAISS for fast and accurate PDF retrieval.
- Developed an AI backend using FastAPI, connecting PDF/text knowledge sources to personalize the learning experience (RAG, vector store).
- Generated lecture content from PDFs via an LLM, applied user-selected emotional tone, and delivered it through a 3D presenter; enabled grounded Q&A on the same materials.
- Collaborated with the team to integrate AI into the web application, ensuring seamless functionality and an interactive learning experience.

Repository: github.com/trongdung143/langchain

AI Chatbot with LangGraph (1 member)   4/2025-Present

Role: Sole Devoloper
Frameworks: LangChain, LangGraph, Together API, Gemini API, Google API, FastAPI, TensorFlow, Sentence Transformers, FAISS, MCP (Tools).
Description:

- Developed a multi-turn conversational AI assistant with natural, human-like dialogue.
- Enabled LLM interaction through LangChain's MCP for task execution with Gmail API, Google Drive, and local file operations.
- Implemented long-term memory using Supabase (PostgreSQL) for conversation history and multi-session context.
- Utilized LangGraph for autonomous tool orchestration based on user intent.
- Combined conversational AI with task automation, ensuring smooth transitions between dialogue and action.

Repository: github.com/trongdung143/chatbot