

# Abdullah Al Muhimine

Aspiring AI Developer and Full-Stack Engineer eager to learn through real-world projects. Passionate about building intelligent systems and growing technical expertise through hands-on experience.

## Top Projects

### Data Structure Learning LLM

Interactive AI Tutor for Algorithms and Data Structures

- Created a platform that teaches and visualizes algorithms using an LLM-powered tutor.
- Integrated Supabase PG Vector for self-learning and personalized responses.
- Separated backend (Python) and frontend (Node.js & TypeScript) for modular design.
- Adopted LangGraph and MCP Server for intelligent reasoning and content flow.

### Bouncy Book Store

Full-Stack Bookstore Application with Real-Time Features

- Developed a responsive e-commerce platform using React, Node.js, and Supabase.
- Integrated JWT-based authentication and secure database management.
- Designed an elegant, animated, and highly organized UI for smooth user interaction

### Flood Forecasting Chatbot

AI-Powered Flood Prediction and Conversational System

- Built a hybrid AI chatbot combining a custom ML model with LLM-based conversation.
- Achieved 90% accuracy in real-time flood forecasting using local dataset validation.
- Integrated LangChain and Gemma2:2B for natural, context-aware dialogue.
- Deployed via Streamlit for interactive user access and visualization.

### Physics Chatbot

LLM-Driven Educational Assistant for Solving Physics Problems

- Designed an AI chatbot capable of detecting and solving physics-related queries.
- Utilized LangChain and HuggingFace Vector DB for reasoning and contextual understanding.
- Implemented complete logic in raw Python code for transparency.

## Educational Background

### Bachelor of Science in Computer Science

North South University

Sep 2020 - Jan 2025 (estimated)

- Specialization in Artificial Intelligence

## Contact

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## Skills

### Technical Skills

- Machine Learning
- Deep Learning
- LLM Integration
- Data Handling
- Full-Stack Dev
- Model Deployment

### Tools & Frameworks

- |             |              |
|-------------|--------------|
| • LangChain | • TensorFlow |
| • LanGraph  | • PyTorch    |
| • React     | • Streamlit  |
| • Node.js   | • Supabase   |
| • Next.js   | • MySQL      |
| • Vercel    | • MongoDB    |

### Programming Languages

- Python
- JavaScript
- TypeScript
- SQL
- C/C++
- HTML/CCCSS

### Areas of Interest

- Artificial Intelligence
- Human–AI Interaction
- Problem Solving
- Web Development
- Software Architecture

## Additional Information

- Contributor to open-source AI projects
- Experienced in dataset collection and preprocessing
- Active on GitHub with multiple AI and web projects
- Enthusiastic about applying AI in real-world solutions