

# Building AI Application with Large Language Model

**Duration: 3 Hours**

**Course Description:**

Elevate your tech and AI career with our cutting-edge Building AI Application with LLM training program. Discover the limitless potential of Building AI application and redefine your expertise in working with large language models.

**Target Audience:**

Looking to take your career in AI and technology to new heights? Our Building an application with LLM training program is designed to empower professionals of all backgrounds, whether you're a seasoned AI researcher, software engineer, data scientist professionals who want to learn and understand the techniques of finetuning, with basic knowledge of python and a knowledge with deep learning framework pyTorch.

**Prerequisites:**

Anyone can attend the course.

**Course Objectives:**

This program equips you with the skills to build AI Application with LLM and dive into real-world case studies that showcase with practical knowledge.

**Course Outline**

**Module 0: Introduction to AI**

- What is Artificial Intelligence
- Brief history of AI
- Importance and applications of AI
- Building blocks of AI
- Type of AI
- AI in Real-world Applications
- Healthcare applications
- Finance and trading
- Autonomous vehicles
- Natural resource management
- AI Tools and Technologies
- AI programming languages (e.g., Python)
- AI libraries and frameworks (e.g., TensorFlow, PyTorch)
- AI development environments

**Module 1: Introduction to Large Language Models**

- What is LLM?
- Historical evolution of LLMs
- What are the Functionality of LLM
- Real time examples of LLM
- Transform Model Architecture of LLM

**Module 2: Capabilities of LLMs**

- Advanced Text Generation
- Understanding Context and Nuance
- Language Translation
- Conversational AI
- Sentiment Analysis
- Code Generation and Auto-completion
- Predictive Text and Autocorrection
- Text Classification

**Module 3: Setting Up the Development Environment with LLM**

- Tools and platforms for LLM development
- Basic setup for creating AI applications with LLMs

**Module 4: Basic Programming with LLMs**

- Introduction to programming with LLMs
- Key terms in Introduction to programming with LLMs
- Text generation, summarization with examples

**Module 5: Advanced Features of LLMs**

- Exploring advanced capabilities: Context retention
- Style mimicry
- Nuanced sentiment analysis
- Style transfer
- Fine-tuning and customization techniques

**Module 6: Integrating LLMs in Applications**

- Techniques for integrating LLMs into existing applications
- API usage and management

**Module 7: Fundamentals of Finetuning**

- What is Finetuning?
- Where finetuning is needed?
- How to finetune a LLM
- Compare a finetune model to a non fine tuned model
- Difference between prompt engineering and Finetuning

**Module 8: Real world Use Cases**

- Case Study 1: Content creation and automation

**Module 9: Real world Use Cases**

- Case Study 2: Customer service chatbots

**Module 10: Future Trends and Conclusion**

- Emerging trends in LLMs and AI
- Discussion on the future impact of LLMs in various sectors

**Module 11: Case Study: LLM Integration in Oakwood High School**

- A case study about the use of a Large Language Model (LLM) in the education sector

**Module 12: Best Optimization Strategies for Large Language Models**

- Data Efficiency Optimization
- Model Architecture Optimization
- Training Techniques Optimization
- Resource Management Optimization
- Fine-Tuning and Generalization Optimization
- Evaluation and Testing Optimization
- Human-in-the-Loop Optimization
- Ethical Considerations Optimization
- Explainability and Interpretability Optimization
- Deployment and Scaling Optimization

**REGISTER NOW!**

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