Agentic AI Application Building Mentoring Program

ANI_425 | Expert-Led Live | Automation and Insights | Expert
Course Duration: 7 weeks

This mentoring program is designed to guide participants through the process of training a basic feedforward model and building an application that utilizes the trained model. Over the course of seven weeks, participants will learn to develop and integrate various components of AI/ML and Agentic AI agents using Python and relevant libraries. Each module will focus on a specific aspect of the application, with exercises that reinforce the learning objectives and contribute to the overall project. The program begins with training a basic feedforward model and then shifts to building an application that leverages the trained model. Each week includes a half-day live session, followed by approximately four hours of self-paced development work on the AI application.

Intended Audience

This course is for telecom professionals implementing AI-driven solutions

Objectives

After completing this course, the learner will be able to:

- Describe the fundamental concepts and applications of AI/ML
- Select the best pre-trained model for the use case
- Build the application backend
- Create the application frontend
- Implement model inference
- Deploy and maintain the AI/ML application with considerations for future enhancements

Outline

1. Session 1: AI/ML and Agentic AI System Setup
1.1 Overview of traditional AI/ML
1.2 Evolution from AI/ML to Agentic AI system
1.3 Key concepts and terminology
1.4 Setting up the development environment
Exercise: Set up environment and connect to AI/ML libraries

2. Session 2: Selecting Pre-Trained Models
2.1 Introduction to pre-trained models
2.2 Overview of Feedforward models
2.3 Using Anomaly Detection models
2.4 Choosing a Time Series Analysis model
Exercise: Selecting the best model for the use case

3. Session 3: Building the Application Backend
3.1 Introduction to backend development
3.2 Setting up the backend framework
3.3 Integrating the trained model into the backend
3.4 Implementing API endpoints
Exercise: Building the application backend

4. Session 4: Creating the Application
4.1 Introduction to frontend development
4.2 Designing the user interface
4.3 Implementing user interaction features
4.4 Integrating frontend with backend systems
Exercise: Creating the application frontend

5. Session 5: Implementing Model Inference
5.1 Introduction to model inference
5.2 Implementing inference logic
5.3 Optimizing inference performance
5.4 Testing and debugging inference
Exercise: Implementing model inference

6. Session 6: Finalizing and Deploying the Application
6.1 Preparing for deployment
6.2 Deployment strategies
6.3 Monitoring and maintenance
6.4 Future enhancements and scalability
Exercise: Finalize and deploy

7. Session 7: Participants Use Case Presentation
7.1 Use case submission
7.2 Use case presentations
7.3 Feedback and wrap-up