A course on Agentic AI : Designed by a Krishna Devotee

Pre-requisites:

Basic Python Programming, Understanding of Machine Learning, Natural Language Processing (NLP) Basics, Mathematics and Statistics and Familiarity with AI Tools.

Start Date: March 30, 2025
Times: 10 to 11 pm every Sunday for 8 weeks
Enroll by filling this form: https://forms.gle/N7XZpXnjGzHEvcLh7

Course Outline:

Module-01: Foundations of Conversational AI
• Introduction to Conversational AI and its applications
• Types of Agents: Chatbots, Voice Assistants, etc.
• History of AI and its use in Conversational systems

Module-02: Advanced Natural Language Understanding (NLU)
• Different NLU approaches (rule-based, machine learning-based)
• Text Pre-processing using NLTK
• Syntactic and Semantic Analysis

Module-03: Introduction to Large Language Models (LLMs)
• Artificial Neural Networks
• Transformer architecture
• What is LLM
• Pre-training objectives (e.g., masked language modeling)
• Fine-tuning LLMs for specific tasks
• Supervised Fine-tuning (SFT)
• Reinforcement Learning from Human Feedback (RLHF)

Module-04: Architecture of Conversational Agents
• Rule-based Chatbots, Retrieval-based Chatbots
• Generative Chatbots
• Transformer-based Models

Module-05: Prompt Engineering and Retrieval Augmented Generation (RAG)
• What is prompt
• Principles of prompt engineering
• Prompt design for different tasks
• Retrieval Augmented Generation (RAG)
• Evaluating LLM outputs and mitigating risks

Hare ram hare ram rama rama hare, hare Krishna hare Krishna krishna krishna hare
https://anupam-purwar.github.io/page/

A course on Agentic AI : Designed by a Krishna Devotee

Module-06: AI Agents
• Agent Architectures
• Environments for AI Agents
• How to build an Agent

Course Instructor: Anupam Purwar
Seattle, USA, +1-253-261-8979, +91-8700946327
anupam.aiml@gmail.com, https://www.linkedin.com/in/anupamisb

Hare ram hare ram rama rama hare, hare Krishna hare Krishna krishna krishna hare
https://anupam-purwar.github.io/page/