ProgAI

A Programmer's Journey into Generative AI

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ProgAI - Version: 1

🕐 2 days Course

Description:

This three-day comprehensive course aims to provide an immersive introduction to the exciting world of Generative AI, focusing on Language Learning Models (LLM) like OpenAI's GPT-4, GPT4All, Llama, Alpaca and much more. The purpose of the course is to offer theoretical understanding along with hands-on experience in working with these sophisticated models, from tweaking their parameters to mastering prompt engineering for a variety of applications, such as building an interactive ChatBot.

This course is an invaluable opportunity to gain direct exposure to AI development techniques, delve into various APIs and explore cutting-edge developments like DALL-E and LangChain, and even apply these models in practical applications such as an AI SQL Query Generator.

Throughout this journey, you will learn how to control LLM memory, chain LLMs and actions, and build LangChain agents, among other skills.

The course culminates with optional workshops where you can apply your newly acquired knowledge to construct a custom knowledge local GPT chat bot or an AI assistant running in Slack.

The advantages of completing this course are manifold. Not only will you understand the inner workings of AI and its applications, but you'll also have the hands-on experience of manipulating AI models to meet specific requirements. This empowers you to solve complex problems, innovate, and add value in various professional settings, from tech startups to established corporations. In essence, this course will equip you with the tools and techniques

to harness the transformative power of AI in today's digital age.

Intended audience:

Developers

Prerequisites:

Basic Python
Basic JS

Objectives:

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Topics:

Day 1

- • Introduction to AI and LLM (GPT)
- • Theory and Intro to LLM and AI
- • GPT under the hood with practical examples
- • Hands-on excipients tweaking GPT
- • Prompt Engineering

- Introduction Prompt Engineering
- Guidelines for working with Prompt Engineering
- Iterative Prompt Development
- Summarizing with Prompt Engineering
- Inferring with Prompt Engineering
- Transforming Information with Prompts
- Using LLMs to Expanding on ideas and information
- Building a ChatBot

Day 2

- Mastering the OpenAI API:
- Introduction to OpenAI API
- Building a ChatGPT in JavaScript
- Exploring DALL-E: AI-Driven Image Generator
- Building an AI SQL Query Generator
- Integrating Natural Language Processing with OpenAI library
- Summary
- LangChain
- Introduction to LangChain
- LangChain Modules
- Prompts with LangChain
- Using Index and Embeddings
- Controlling LLM Memory
- Chaining LLM and actions
- Building LangChain Agents