

Course Name : **OpenAI Python API Masterclass - Learn AI & GPT**
Duration : **3 Days (Physical Classroom / Virtual Live Instructor)**
Skill Level : **Beginner**

COURSE DESCRIPTION:

Embark on a transformative journey into the realm of Artificial Intelligence with our comprehensive three-day OpenAI Python API Course. Delve deep into the intricacies of AI technologies, from mastering the basics of OpenAI API to exploring advanced text generation and sentiment analysis techniques.

Throughout this immersive course, you'll commence with a foundational Python Crash Course, laying the groundwork for harnessing the capabilities of OpenAI API. From there, you'll explore diverse topics such as text generation, automated exam creation, recipe and image generation, sentiment analysis, and fine-tuning models for conversational AI. Each session combines theoretical insights with hands-on projects, ensuring participants gain practical skills to seamlessly integrate AI into their applications.

Led by expert instructors, this course offers personalized guidance and support, empowering participants to overcome challenges and achieve their learning objectives. By the course's conclusion, participants will possess the expertise and confidence to effectively leverage OpenAI API, opening avenues for innovative AI-driven solutions. Join us on this enlightening journey and elevate your understanding of AI with the OpenAI Python API Course.

WHAT WILL YOU LEARN?

Throughout the OpenAI Python API Course, you'll gain a comprehensive understanding of Artificial Intelligence as you explore various topics, including text generation, sentiment analysis, and fine-tuning models for conversational AI. By the course's conclusion, you'll be proficient in making API calls, crafting automated exams and blog posts, generating recipes and dish images, analyzing sentiments from Reddit, and leveraging advanced text embedding techniques. Through hands-on projects and expert guidance, you'll acquire practical skills to integrate OpenAI API seamlessly into your applications, enabling you to embark on innovative AI-driven projects with confidence and creativity.

PREREQUISITE:

Beginners. No programming/data analysis knowledge is required.

METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- AI Developer
- Data Scientist
- AI Researcher
- AI Consultant
- NLP Engineer

MODULE 1: PYTHON CRASH COURSE

- Welcome
- Introduction to Python Programming Language
- Basics of Python Syntax and Data Structures
- Functions, Modules, and Packages in Python
- Handling Errors and Exceptions
- Introduction to Object-Oriented Programming (OOP) in Python

MODULE 2: INTRODUCTION TO OPENAI API AND ESSENTIALS

- Unveiling the Power of OpenAI API
- Decoding GPT Models: Behind the Scenes
- Delving into DALL-E Models: A Visual Journey
- Initiating Your OpenAI Account Journey
- Navigating AI Ethics and Safety
- Updates and Pricing: What's New in OpenAI World

MODULE 3: EMBARKING ON TEXT GENERATION

- Mastering API Calls for Text Generation
- Conversational AI: From Natural Language to SQL
- Preparing Tabular Data for Conversational Interfaces
- Crafting Natural Language Queries
- Unleashing the Potential of Text Completion API

MODULE 4: PROJECT: CRAFTING AUTOMATED EXAMS

- Crafting Prompts for Automatic Exam Generation
- Unearthing Q&A Gems from Text Corpus
- Simulation Techniques for Exam Generation
- A Guided Tour of Python Script Magic

MODULE 5: PROJECT: COOKING UP RECIPES AND DISH IMAGES

- Culinary Adventures: Exploring the Recipe Project
- Stirring up Recipe Text with API Magic
- Painting Dish Images with DALL-E
- From Script to Plate: A Python Script Unraveled

MODULE 6: SENTIMENT ANALYSIS UNLEASHED

- Sentiment Analysis: The Emotion Detective
- Unveiling Reddit's Emotional Landscape
- Decoding Sentiments with OpenAI API

MODULE 7: DEMYSTIFYING CODE: AN AI EXPLORER'S GUIDE

- The Enigma of DocStrings: Unraveling Code Narratives
- Extracting Code Insights with OpenAI API
- Bridging Code and Commentary: Merging Python Functions and DocStrings
- A Deep Dive into Python Script Alchemy

MODULE 8: MULTILINGUAL MARVELS: THE TRANSLATION PROJECT

- Exploring the Translation News Summary Expedition
- Scouting International News Territories
- Translation and Summarization with OpenAI API

MODULE 9: FINE-TUNING AND CONVERSATIONAL AI

- Navigating the Fine-Tuning Frontier
- Preparing Data for Fine-Tuning Adventures
- Fine-Tuning Process and Price Estimation
- Conversational Excellence with Fine-Tuned Models

MODULE 10: ADVANCED TEXT EMBEDDING TECHNIQUES

- Unlocking Text Embedding's Hidden Gems
- Model Hallucination: Beyond the Text Realm
- Navigating Document Data with Text Embedding
- Injecting Context: The Art of Amplifying Meaning

MODULE 11: CONVERSATIONAL WIZARDRY: CHATGPT-API

- Mastering the Art of Conversation with ChatGPT API
- Journeying through History with ChatGPT: A Tutor's Tale
- Exploring ChatGPT API's Historical Conversations
- Designing Engaging Conversational Experiences
- Implementing Contextual Chatbot Interactions
- Deploying ChatGPT API in Real-world Scenarios

MODULE 12: WHISPERS OF WISDOM: THE WHISPER API

- Unveiling the Whisper API: A Gateway to Audio Summaries
- Understanding the Power of Audio Summarization
- Exploring Whisper API's Key Features and Capabilities
- Integrating Audio Summaries into Applications
- Enhancing User Experiences with Audio Content

CONCLUSION

- QA
- Useful References and Books
- Feedback