

2.233 | June IAP 2024

Full Stack Development Using Generative Ai

6 Month's Programme

6 Month's Internship

Full Stack Development using Generative AI, where cutting-edge technology meets versatile expertise. In this specialized program, participants delve into the fusion of Full Stack Development principles with the power of Generative AI, unlocking limitless creative potential and innovation. Led by seasoned professionals, the curriculum encompasses a comprehensive spectrum of skills, spanning frontend and backend development, database management, and AI integration.





**Human Intelligence
Meets Artificial
Learning
Intelligence**
**Welcome to AiML
Campus School of
Machine Learning,
where innovation
meets education!**
**Our one-year
Specialization
program offers a
unique blend of
comprehensive
learning and
practical experience,
tailored for highly
motivated
individuals with a
passion for Machine
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Learning (MACUL)
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MUMBAI

First International Financial
Level 1 & 3A, First International Financial
Centre, Plot Nos. C-54 & C-55 G Block Road,
Bandra Kurla Complex, Bandra East, Mumbai,
Maharashtra 400051, India

BANGALORE

Helios Business Park
Level 6, Tower E & Level 10, Tower C, Helios
Business Park Wing C, No. 150 Outer Ring Road,
Kadubeesahalli, Bangalore, Karnataka 560103,
India

OUR CORE TOPICS IN FULL STACK DEVELOPMENT USING GENERATIVE AI

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1

Fundamentals of Programming

Basics of Java, Object-Oriented Design, Java Project Submission, Advanced Java Concepts, Exception Handling in Java, Java Collections Framework, Multithreading in Java, Java I/O (Input/Output), Database Connectivity with JDBC (Java Database Connectivity), GUI (Graphical User Interface) Development in Java, Networking in Java, Java Servlets and JSP (JavaServer Pages), Java Persistence API (JPA) and Hibernate, Spring Framework in Java Development

2

Data Structures and Algorithms

Algorithms Analysis and Bit Manipulation, Arrays and Linked Lists, Stacks and Queues, Searching and Sorting, Sets and Dictionaries, Trees and Graphs, Dynamic Programming, Greedy Algorithms, String Manipulation and Pattern Matching, Recursion and Backtracking

3

Introduction to Generative AI

Understanding Generative AI, Applications of Generative AI, Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), Deep Convolutional Generative Adversarial Networks (DCGANs), Conditional Image Generation, Text Generation with Language Models, Hands-on Project: Implementing a Simple Generative AI Model

4

Full Stack Development Integration

Integrating Generative AI into Frontend Development, Integrating Generative AI into Backend Development, Building Intelligent APIs with Generative AI, Project: Developing a Full Stack Application with Generative AI Integration

5

Advanced Topics in Generative AI

Attention Mechanisms in Generative Models, Style Transfer and Image-to-Image Translation, Super-Resolution and Denoising, Ethical Considerations in Generative AI, Attention Mechanisms in Generative Models, Style Transfer and Image-to-Image Translation, Super-Resolution and Denoising.

6

Capstone Project in Full Stack Development Using Ai

Attention Mechanisms in Generative Models, Style Transfer and Image-to-Image Translation, Super-Resolution and Denoising, Ethical Considerations in Generative AI, Transfer Learning in Generative Models, Multi-Modal Generative Models,