

Introduction to generative AI training

Embark on a journey into the world of Generative AI with this course, tailored to provide a solid foundation in understanding the principles, technologies, and algorithms that define this innovative branch of Artificial Intelligence. Discover how Generative AI is transforming industries by exploring its core concepts and practical applications.

Audience

No specific prequisite

Content of the Training: 4 hours duration

Module 1 : Core Concepts of Generative Al:

- Defining Generative AI and its impact
- Historical development and advancements
- The role of neural networks and language models
- Understanding loss functions
- Importance of diverse training datasets

Module 2 : Essential Models and Algorithms:

- Introduction to Generative Adversarial Networks (GANs)
- Overview of Variational Autoencoders (VAEs)
- Exploration of diffusion models
- Insight into transformer models
- Examination of additional generative approaches

Module 3: Creating and Training Models:

- Strategies for dataset selection and model development
- Techniques in dimensionality reduction
- Understanding latent space and its significance
- Approaches to sampling and evaluation
- Assessing model performance and accuracy

Module 4: Practical Applications of Generative AI:

- Broad overview of use cases
- Innovations in content creation
- Utilization in synthetic data generation
- Enhancements in personalization and recommendations
- Applications in customer service improvement

Module 5: Navigating Legal and Ethical Terrain

- Addressing legal and ethical challenges
- Ensuring fairness and mitigating bias
- Privacy and data protection considerations
- Managing intellectual property and copyright issues
- Understanding the impact of deep fakes and misinformation
- Overview of Al-related legislation and regulations