

Generative AI (GenAI) Course: Introduction and Objectives

Welcome to the Generative AI (GenAI) course! This course is designed to provide you with a comprehensive introduction to the theory, techniques, and applications of generative artificial intelligence.

What You Will Learn:

- The foundations of machine learning and deep learning
- Core GenAI models: Variational Autoencoders (VAEs), Generative Adversarial Networks (GANs), and Transformers
- Prompt engineering and fine-tuning of large language models (LLMs)
- Ethical considerations in generative content

Course Objectives:

1. Understand how generative models are trained and evaluated.
2. Build and experiment with popular GenAI architectures.
3. Apply generative models to real-world problems such as text generation, image synthesis, and code completion.
4. Critically analyze the societal impacts and limitations of GenAI technologies.

By the end of this course, you will have the practical knowledge and hands-on experience needed to develop and deploy generative models responsibly and effectively.