

AI Horizons: Unveiling the Future of Generative Intelligence

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Abstract: *Generative AI is basically a subfield of artificial intelligence. It mainly focuses on developing systems that can generate creative outputs such as images, music, text, and more. By deep learning techniques, Generative models are capable of independent producing content that look like human-generated creations. The key characteristic of Generative AI is its capacity to learn from huge datasets, catch patterns, and generate new content that show similar characteristics. In recent years, Generative AI models such as generative adversarial networks (GANs) and variational autoencoders (VAEs). GANs consist of two components: a generator network and a discriminator network those engaged in a competitive process of generating and evaluating content. VAEs employ an encoder-decoder architecture to learn and generate new samples.*

This paper discusses the key areas where Generative AI is expected to make significant contributions in the future. These areas include: Healthcare, Art and Entertainment, Ethical and Societal Considerations, Autonomous Systems, Content Creation etc.

Keywords: Generative AI, Internet of Things (IoT), Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), Deep learning

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