



Generative AI **vs** Applied AI

From Creativity to Productivity

Introduction

Artificial Intelligence (AI) is a transformative technology that has made significant inroads into various industries, enhancing efficiencies and enabling new capabilities. Within AI, two prominent branches are Generative AI and Applied AI. While both leverage complex algorithms and data processing capabilities, they serve different purposes and have distinct characteristics. This article introduces these two branches, highlights their differences, and explores some well-known examples. Additionally, we will introduce **HERA**, a data analysis platform powered by deep learning and Applied AI, developed by IRIS Sepid Analytics, and discuss its applications in industries such as banking, capital markets, and insurance.

Generative AI

Generative AI refers to a category of AI models that are designed to create new content, such as text, images, music, or even entire virtual environments. These models are typically based on advanced neural networks, like Generative Adversarial Networks (GANs) or Variational Autoencoders (VAEs), which learn from large datasets to generate novel outputs that mimic the training data. The key strength of Generative AI lies in its ability to produce creative and high-quality content that can be used in a variety of applications, from entertainment to design and beyond.

Examples of Generative AI:

- **OpenAI's GPT (Generative Pre-trained Transformer):** A language model that generates human-like text based on input prompts, used in chatbots, content creation, and more.
- **DALL-E:** Another model from OpenAI that generates images from textual descriptions, allowing users to create art and design elements through simple text inputs.
- **DeepMind's WaveNet:** A generative model for audio that produces realistic human-like speech and music, used in voice synthesis applications.

Applied AI

Applied AI, on the other hand, focuses on the use of AI technologies to solve specific, practical problems within various industries. Rather than generating new content, Applied AI typically involves the deployment of machine learning, data analysis, and other AI techniques to optimize processes, make predictions, automate tasks, and enhance decision-making. The aim of Applied AI is to create tangible business value and improve operational efficiencies.

Examples of Applied AI:

- **IBM Watson:** A suite of AI tools that provide insights and automate complex processes in healthcare, finance, and customer service.
- **Salesforce Einstein:** An AI platform that offers predictive analytics and automation tools tailored for CRM, enhancing sales and customer service strategies.
- **Google Cloud AI:** A collection of AI services, including natural language processing, computer vision, and machine learning tools, used across various industries for data-driven decision-making.

VS

The primary difference between Generative AI and Applied AI lies in their objectives and outputs. Generative AI is about creativity and content generation, often creating something new from learned data patterns. In contrast, Applied AI is task-oriented, focusing on applying AI to solve specific business problems, improve efficiency, and add value to existing processes. Generative AI is generally more exploratory and open-ended, while Applied AI is purpose-driven and closely aligned with real-world applications.

HERA

**A Data Analysis
Platform by
IRIS Sepid Analytics co.**

HERA is a cutting-edge platform developed by IRIS Sepid Analytics that utilizes deep learning and Applied AI to provide sophisticated data analysis solutions. It is designed to analyze complex datasets, extract valuable insights, and support decision-making processes in real-time. By leveraging deep learning techniques, HERA can handle large volumes of data, identify patterns, and make predictions that are highly accurate and reliable.

HERA and similar Applied AI solutions offer significant benefits to industries such as banking, capital markets, and insurance:

- **Banking:** Providing customer insights, regulatory insights and automating complex processes in banking and finance sector.
- **Insurance:** A collection of AI services, including natural language processing, computer vision, and machine learning tools, used across various industries for data-driven decision-making.
- **Capital Markets:** An AI platform that offers predictive analytics and automation tools tailored for CRM, enhancing sales and customer service strategies.

Generative AI and Applied AI represent two pivotal branches of artificial intelligence with distinct goals and applications. While Generative AI focuses on creating new content, Applied AI is geared towards solving practical problems and enhancing operational efficiencies. Platforms like HERA from IRIS Sepid Analytics exemplify how Applied AI can be harnessed to deliver substantial benefits across various industries, driving innovation and competitive advantage. As AI technologies continue to evolve, the potential for both Generative and Applied AI to transform industries will only grow, offering exciting opportunities for businesses and society alike.



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