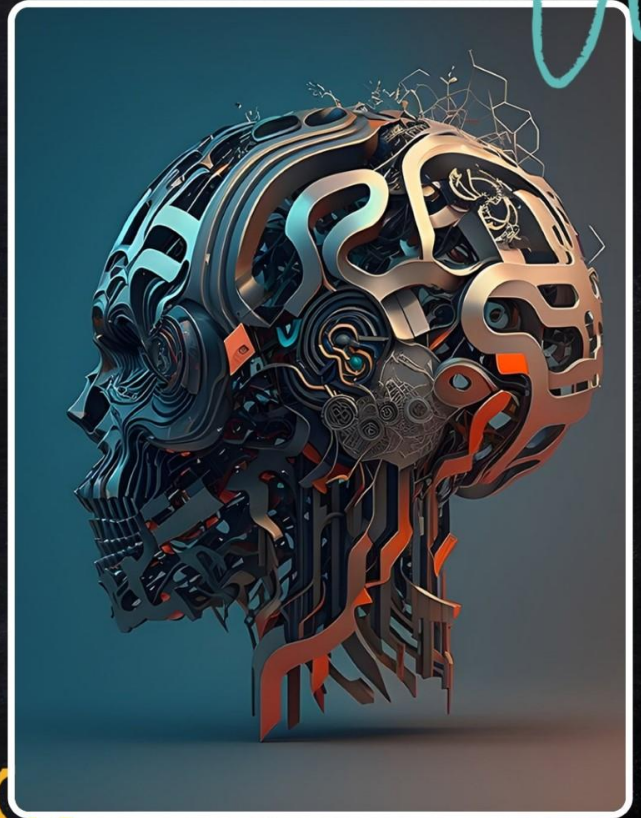


Generative AI

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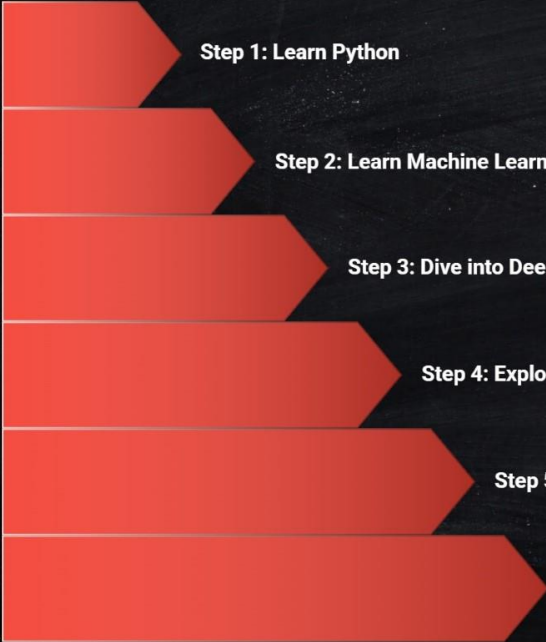




What is Generative AI?

- 01 **Generative AI** refers to artificial intelligence systems that create new and original content based on patterns they learn from existing data.
- 02 Unlike traditional AI, which focuses on tasks like classification or prediction, **generative AI creates** things such as text, images, music, and videos.
- 03 **Text Generation:** AI that can write articles, stories, or even poetry.
- 04 **Image Creation:** AI that can generate new images based on text descriptions.
- 05 **Music Composition:** AI that can compose original pieces of music.
- 06 This type of AI is widely used in many industries like **entertainment, marketing, design, and software development**.
- 07 It helps automate content creation and boost **creativity**.

Tech Stacks and Tools Used in Generative AI



Step 1: Learn Python

Step 2: Learn Machine Learning (ML)

Step 3: Dive into Deep Learning

Step 4: Explore Generative Models

Step 5: Work on Hands-On Projects

Step 6: Stay Updated



Learning Path for Generative AI

Step 1: Learn Python:
Master the basics of Python, along with libraries like NumPy and Pandas.

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Step 3: Learn Deep Learning: Study neural networks with TensorFlow or PyTorch.

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Step 5: Build Projects:
Work on real-world projects like chatbots, music generation, or creating synthetic images.

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Step 2: Learn Basic Machine Learning:
Understand how machines can learn from data using Scikit-learn.


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Step 4: Focus on Generative Models: Learn how AI can create new content using GANs and Transformers.

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Step 6: Stay Curious:
Keep learning by reading papers, following AI researchers, and joining AI communities.

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Why Should You Learn Generative AI?

- 01 **Growing Industry Demand:** With AI automating content creation, industries like entertainment, healthcare, marketing, and education are increasingly relying on generative AI.
- 02 **Boost Creativity:** If you're a creative professional, generative AI offers exciting ways to expand your work, making it easier to generate new ideas or content.
- 03 **Career Opportunities:** The rise of AI means that companies are hiring AI engineers, data scientists, and machine learning researchers at an increasing rate. Learning generative AI will put you ahead in the job market.