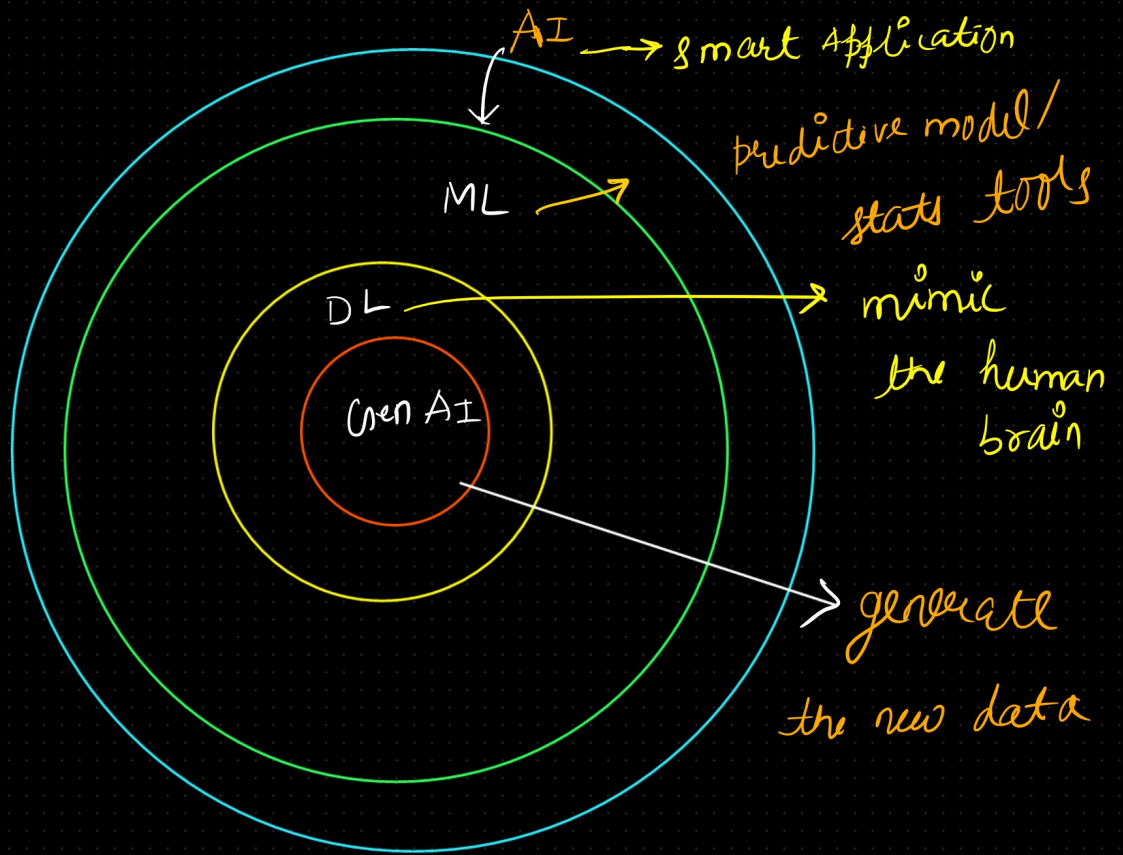


Generative AI (Gen AI)



ML is a subset of AI

DL is a subset of ML

Gen AI is a subset of DL

Generative AI

Gen AI refers to a subfield of AI that focuses on creating new, original content.

- Images
- Videos
- Text
- Music
- Data

→ Gen AI Model learn patterns and structures from training / existing data and use this knowledge to generate new, synthetic data that resembles the original data.

types of Gen AI Model

- (1) GAN → Generative Adversarial Network
- (2) RNN → Sequential data → text, speech
- (3) Variational AutoEncoders
→ learn to compress and reconstruct data.

Applications of Generative AI:

- 1. Data augmentation: Generate new training data to improve model performance.
- 2. Content creation: Generate new images, videos, music, or text.
- 3. Data imputation: Fill missing values in datasets.
- 4. Anomaly detection: Identify unusual patterns in data.

Benefits of Generative AI:

- 1. Increased efficiency: Automate content creation and data processing.
- 2. Improved accuracy: Enhance model performance with generated training data.
- 3. New possibilities: Explore new creative possibilities in art, music, and more.