**Introduction**

Synthetic Data generation reside under the field of Generative AI; **Generative AI** is a kind of machine learning techniques that involve the creation of new data samples from the trained models. These models can also be called as the generative models.

In other words, generative models learn the underlying patterns and structures of a given dataset and can generate new samples that resemble the original data.

**HMASynthesizer**

The HMA Synthesizer uses hierarchical ML algorithm to learn from real data and generate synthetic data. The algorithm uses classical statistics.

01/06/2023

First implementation completed:

* PROs:
  + project structure implemented
* CONs:
  + HMA model presents limitations in dependency detection:

**# Region VS Balance dependency replication**

**Immagine che contiene testo, schermata, software, numero

Descrizione generata automaticamente**

**# Employment\_Type VS Balance dependency replication**

**Immagine che contiene schermata, testo, Diagramma, software

Descrizione generata automaticamente**