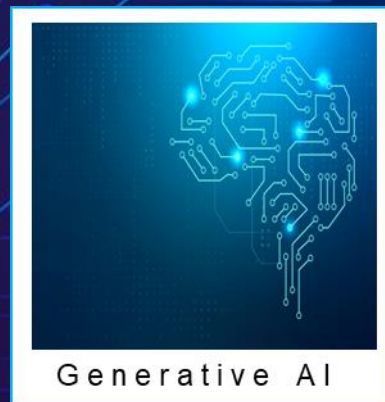




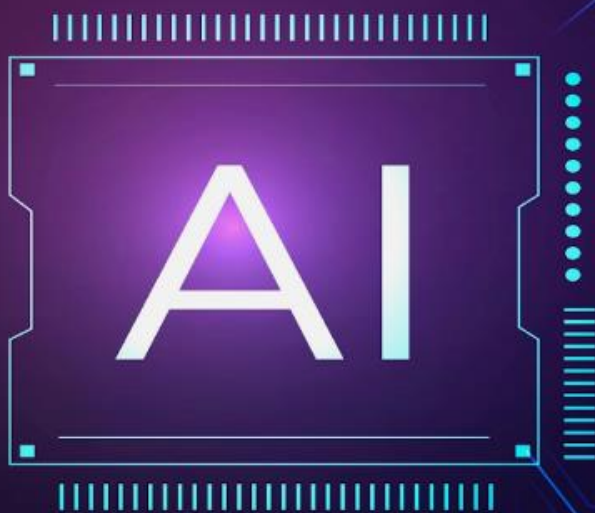
SHYENA
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Case Study

Synthetic Data Generation for Recommender System using Generative AI



About the Client

The Client is a Growing Ecommerce company

Business Problem

Our client, a burgeoning ECommerce Company specializing in online groceries, fruits, and vegetables, embarked on a mission to boost their online product sales. With a new portal, they recognized the potential of an AI-powered recommender system to enhance user engagement and drive additional purchases. They aspired to provide personalized product recommendations to users post-purchase, thereby increasing their overall order value. However, a challenge arose due to the portal's newness – a lack of sufficient historical data for effective machine learning model training.

Solution

Understanding the significance of personalized recommendations in driving sales, our team set out to devise a solution that aligned with the client's goals. Despite the scarcity of historical data, we were committed to progressing with the development. We proposed leveraging synthetic data generation to bridge the data gap and enable effective machine learning model training.

To realize this, we harnessed the capabilities of Gretel.ai, a cutting-edge platform for synthetic data generation. By analyzing the limited historical data available, we used Gretel.ai to create high-quality synthetic data representative of real user interactions and preferences. This synthetic data simulated user personas and behavior, enabling us to emulate diverse purchase patterns.

Outcome

The outcomes of our innovative approach were transformative. Leveraging the synthetic data generated by Gretel.ai, we successfully developed an AI-powered recommender system that surpassed expectations. Despite the portal's newness and lack of traditional historical data, our solution empowered the client to provide personalized recommendations to users post-purchase.

The AI-powered recommender system harnessed the synthesized data to offer tailored suggestions, driving additional purchases and elevating user engagement. With each recommendation backed by a comprehensive understanding of user personas, preferences, and historical trends, the system proved its effectiveness in increasing order values.

Our approach not only addressed the immediate challenge of data scarcity but also set the foundation for future data collection and model refinement. The client was impressed by the speed at which the recommender system was developed and the tangible impact it had on their online sales.

In conclusion, the successful implementation of the AI-powered recommender system exemplified our commitment to innovation and problem-solving. By leveraging synthetic data and advanced technology, we transformed a data challenge into an opportunity to drive online product sales and user satisfaction.

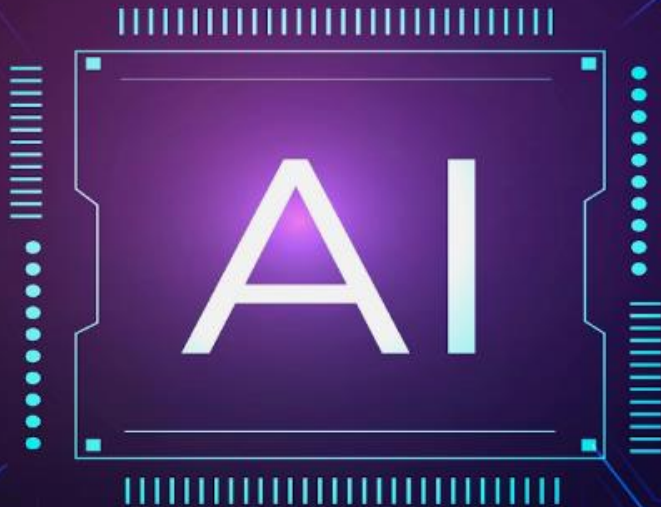
Technology Used

Python, Synthetic Data Generation using Gretel.ai



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