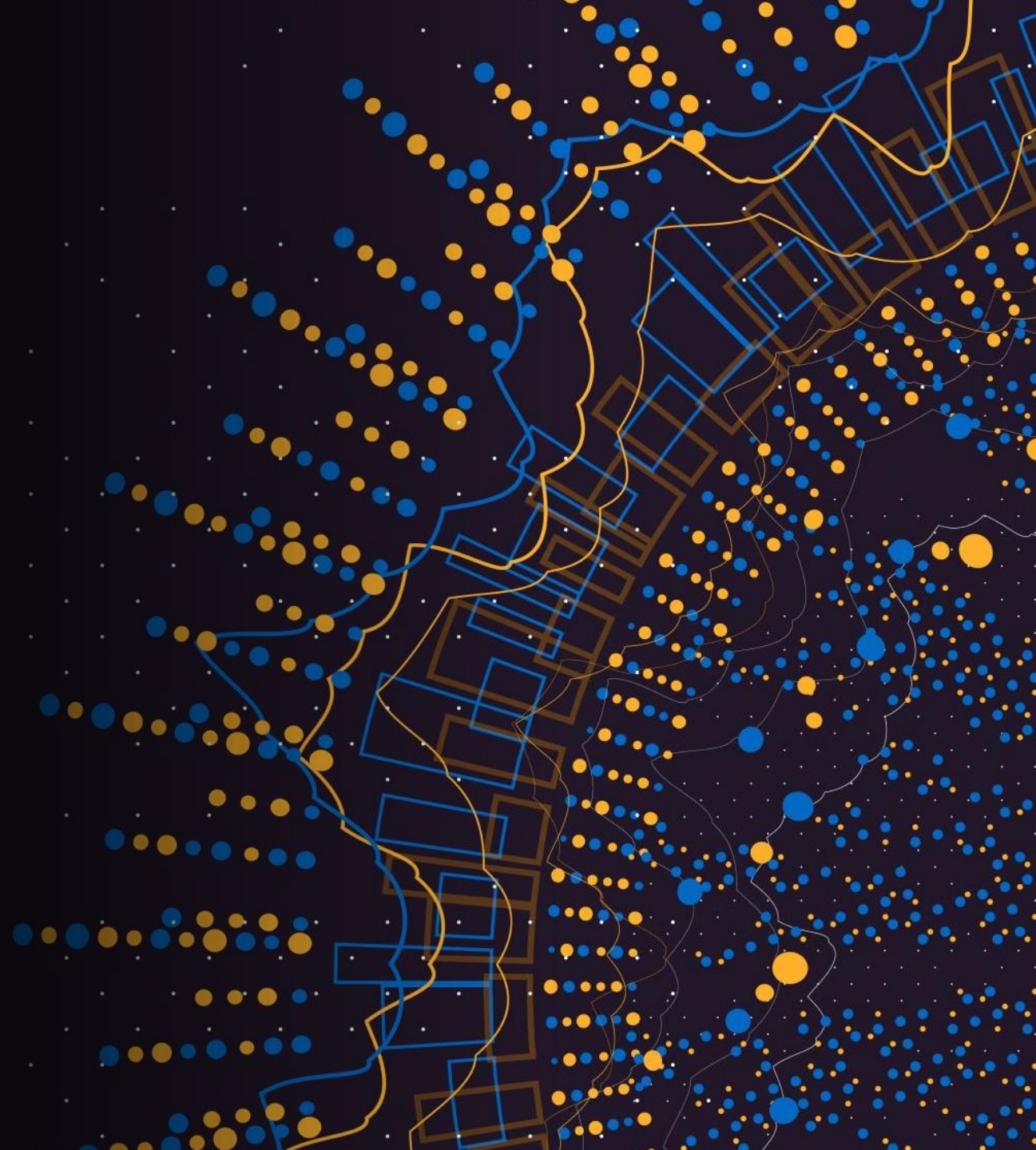




Recommendation System Using Machine Learning

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What is a recommendation System?

- Simply put – It is a Filtering tool which uses Machine learning Algorithms to recommend the most Relevant Items to user.
- It operates on the principle of finding patterns in consumer behavior data, which can be collected implicitly or explicitly.

Popular Examples



Why Do we Need Recommendation System?

- Recommender systems are an essential feature in our digital world, as users are often overwhelmed by choice.
- A recommendation system helps users find compelling content in a large collection.
- For example, the Google Play Store provides millions of apps, while YouTube provides billions of videos. More apps and videos are added every day. How can users find new compelling new content? Yes, one can use search to access content. However, a recommendation engine can display items that users might not have thought to search for on their own.
- Recommender systems are like salesmen who know, based on your history and preferences, what you like.

How Do they work?

- A recommendation engine works using a combination of data and machine learning technology.
- Data is crucial in the development of a recommendation engine – it is the building blocks from which patterns are derived. The more data it has, the more efficient and effective it will be in making relevant revenue-generating suggestions.
- Recommendation engines complete a standard four-step process:
 1. Data collection : Implicit and Explicit Data
 2. Data storage : Once the data is gathered, it needs to be stored.
 3. Data Analysis : Real-time analysis , Batch Analysis, Near-real-time Analysis .
 4. Data Filtering : . Different matrixes or mathematical rules and formulas are applied depending on whether **collaborative, content-based, or hybrid model** recommendation filtering is being used. The outcome of this filtering is the recommendations.



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