Hadoop's Role in Recommendations

Hadoop architecture, including HDFS, MapReduce, and YARN, plays a pivotal role in building scalable recommendation systems. It allows for processing large datasets across distributed clusters.

- Hadoop Architecture
- Scalable Systems
- Large Dataset Processing

Presentation Outline

1. Content-Based Filtering
2. Hybrid Systems
3. Collaborative Filtering
4. Introduction
5. Hadoop Architecture
6. Algorithms

Introduction to Content Recommendation Engines

Content recommendation engines are crucial in personalizing the user experience by suggesting relevant content to users. Leveraging Hadoop's distributed computing capabilities enhances scalability and efficiency.

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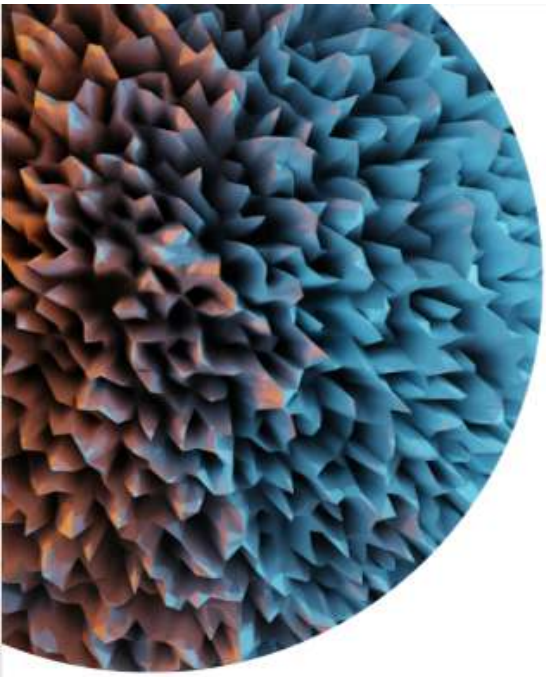
HDFS stores large-scale data, MapReduce handles batch processing, YARN manages resources and scheduling, while Hive and Pig provide high-level data processing and querying.

Hadoop's Components

What are the key components for recommendation engines?

Hadoop and Recommendations

Algorithms in Recommendation Engines



Algorithms Overview

Hybrid

Various algorithms power content recommendation engines, ranging from collaborative filtering and content-based filtering to hybrid approaches that combine multiple methods for better accuracy.

Collaborative Filtering

Hybrid

Content-Based Filtering

Hybrid approaches integrate various techniques to enhance recommendation accuracy.

Collaborative Filtering

Collaborative filtering leverages user behavior and interactions to recommend content. It is categorized into user-based and item-based filtering.

Collaborative Filtering

User-Based Filtering

- Recommendations
- Content/User interactions
- Item-Based Filtering

Content-Based Filtering

Content-based filtering recommends items resembling the ones a user has shown interest in by analyzing item features and user preferences.

Checked out the item features and user preferences?

What next?