



Next-Generation Recommender

A collaborative, contextual and content-based recommender

Context

In 2017, an airline was launching a new accommodation booking service. They had limited data on guests using this new service and wanted to explore how it could offer a more personalised experience to these customers. The two main approaches to recommender systems are Collaborative Filtering and Content-based approaches, which do not perform well where there is limited data.

Technology overview

A real-time hybrid recommender that combines different techniques and exploits all the available information about users, such as:

- User preferences to personalise recommendations
- Group preferences to capture preferences of similarly grouped people
- Data associated with items to apply content-based techniques
- Contextual Information

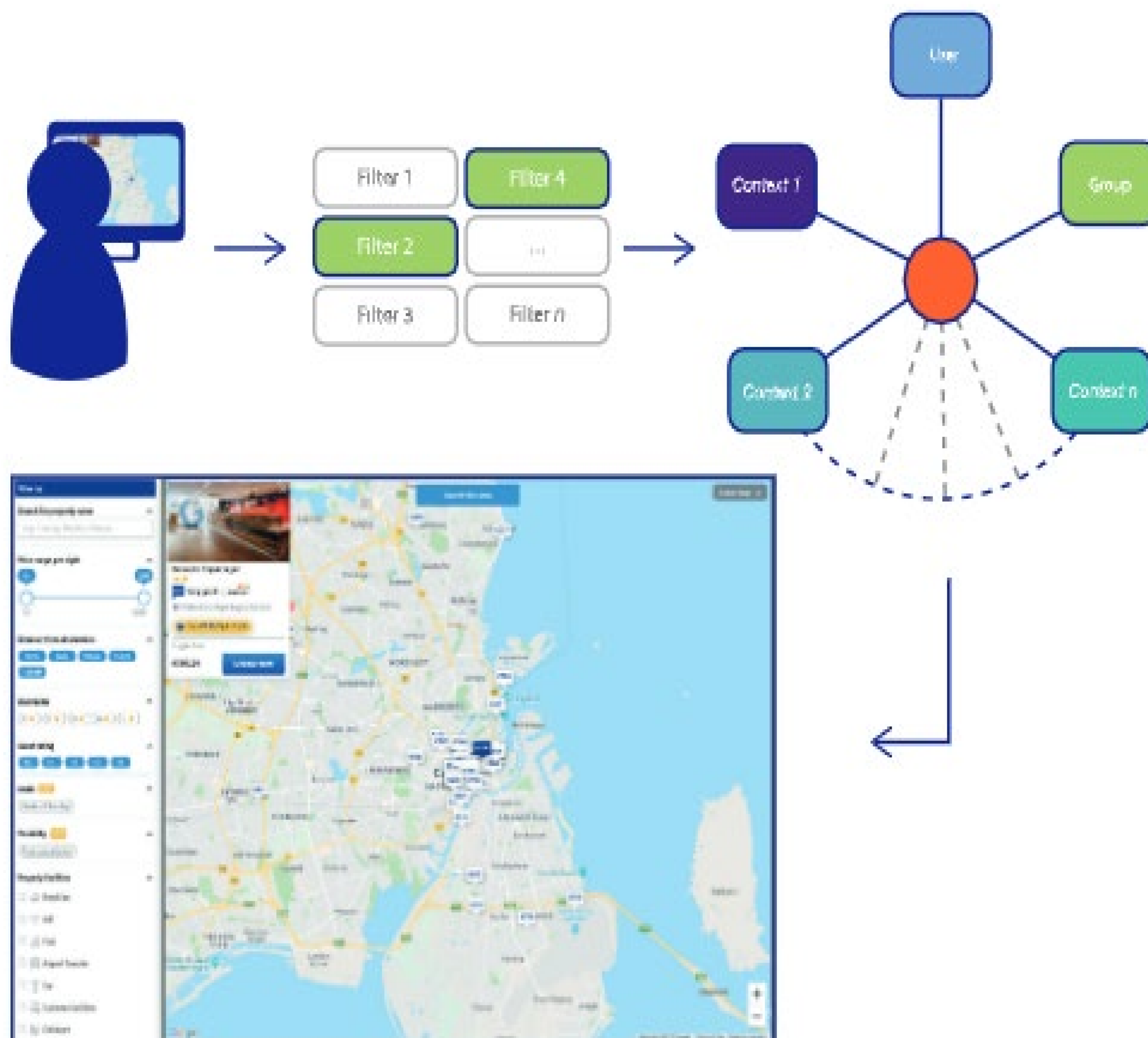
Inputs: User preferences and contextual information

Adapt Technology: Hybrid approach that blends elements of naïve collaborative filtering, content-based recommendation and contextual suggestion.

Outputs: Custom accommodation recommendations for guests using the service.

Advantages

- A recommender that overcomes the cold start problems of content based and collaborative filtering approaches
- Deployed with airline for evaluation
- Does not require significant rating data
- Generates personalised recommendations
- Provides real-time and robust recommendations



Technology Sector

Digital Platforms, Content and Applications

Opportunity

License
Research collaboration

Researcher(s)

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