

Integrated Personalized Recommender System

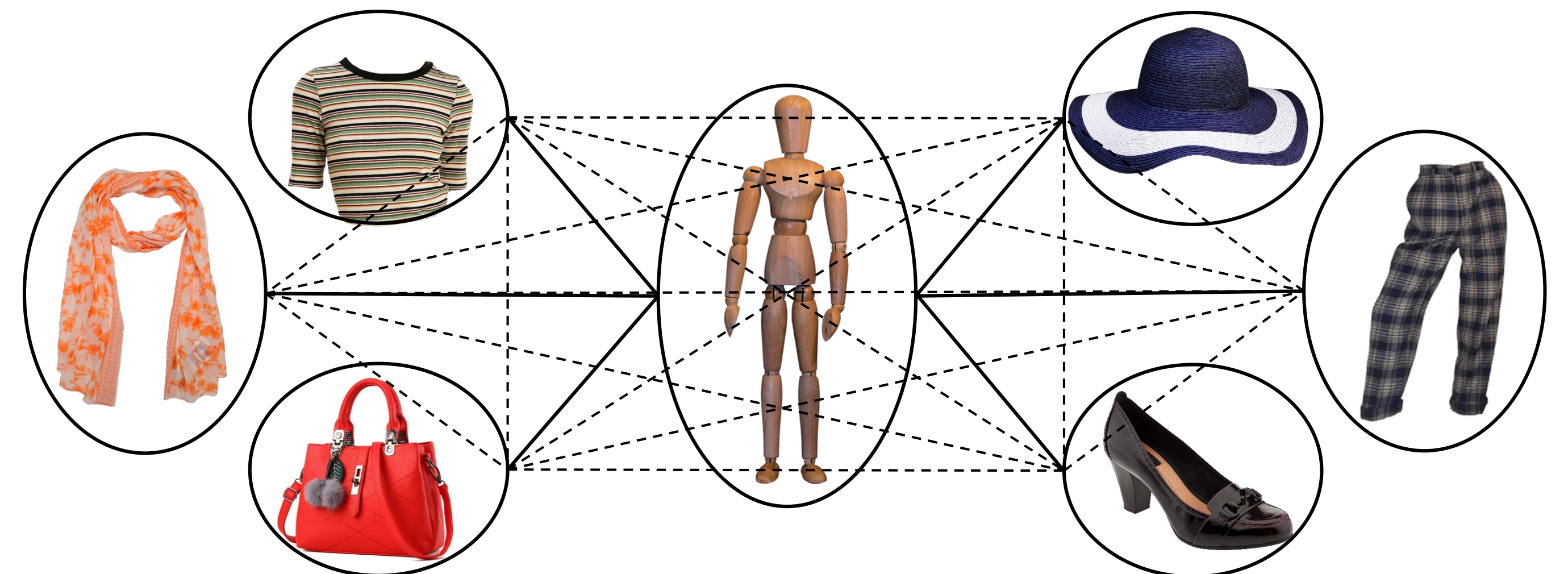
Background

Nowadays online shopping is becoming an essential part of our life. Different types of online recommender systems have been developed to facilitate customers to reach their expected products in a timely and convenient manner. Here we propose a personalized recommendation framework for the fashion domain, to suggest similar and matched products to customers. This recommender system accounts for typical features of clothes including their semantic descriptions, shapes, colours and patterns. In addition, the system can explore customers' preferences and thus generate customized recommendations.

Recommender for similar products



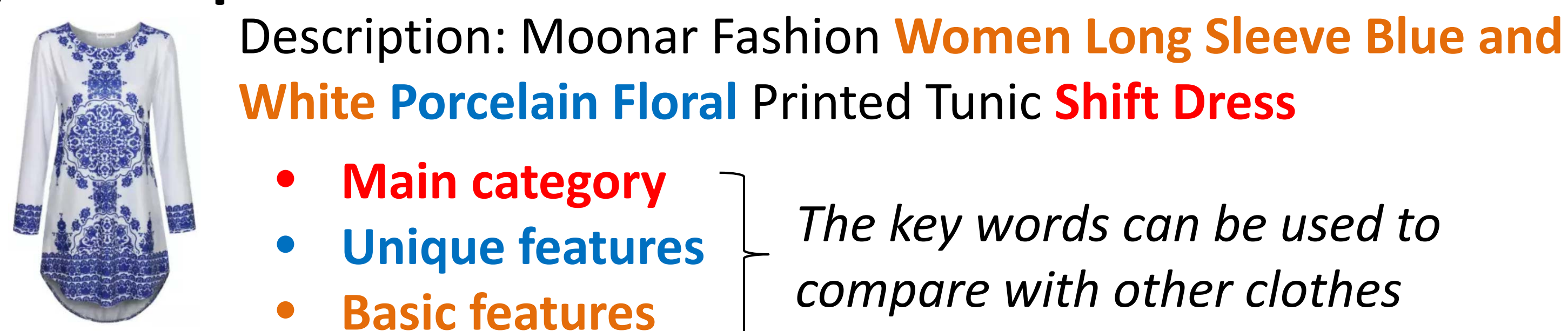
Recommender for matched products



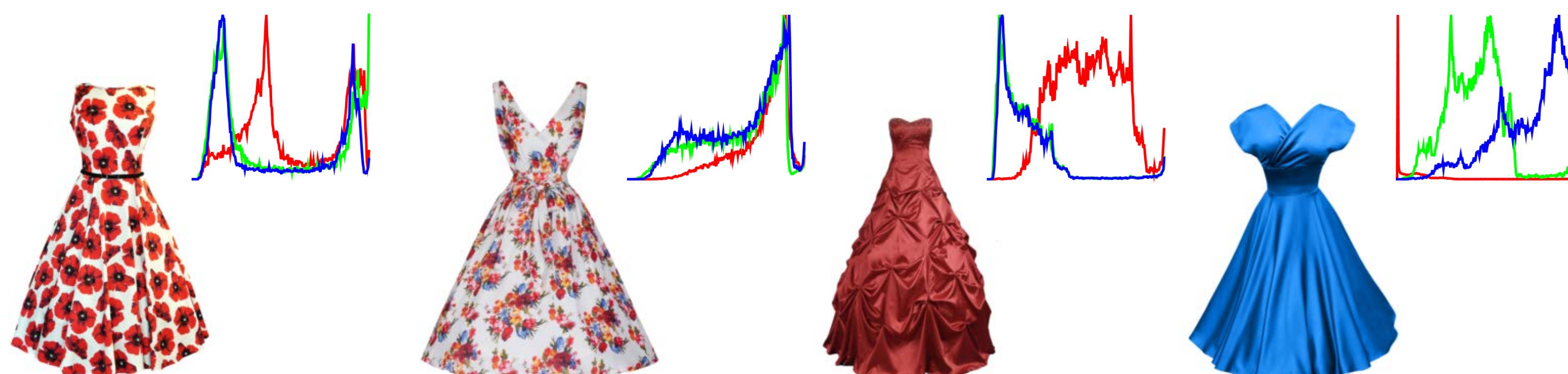
Introduction

When we choose clothes, what do we care about?

(1) Description



(3) Color



(2) Shape

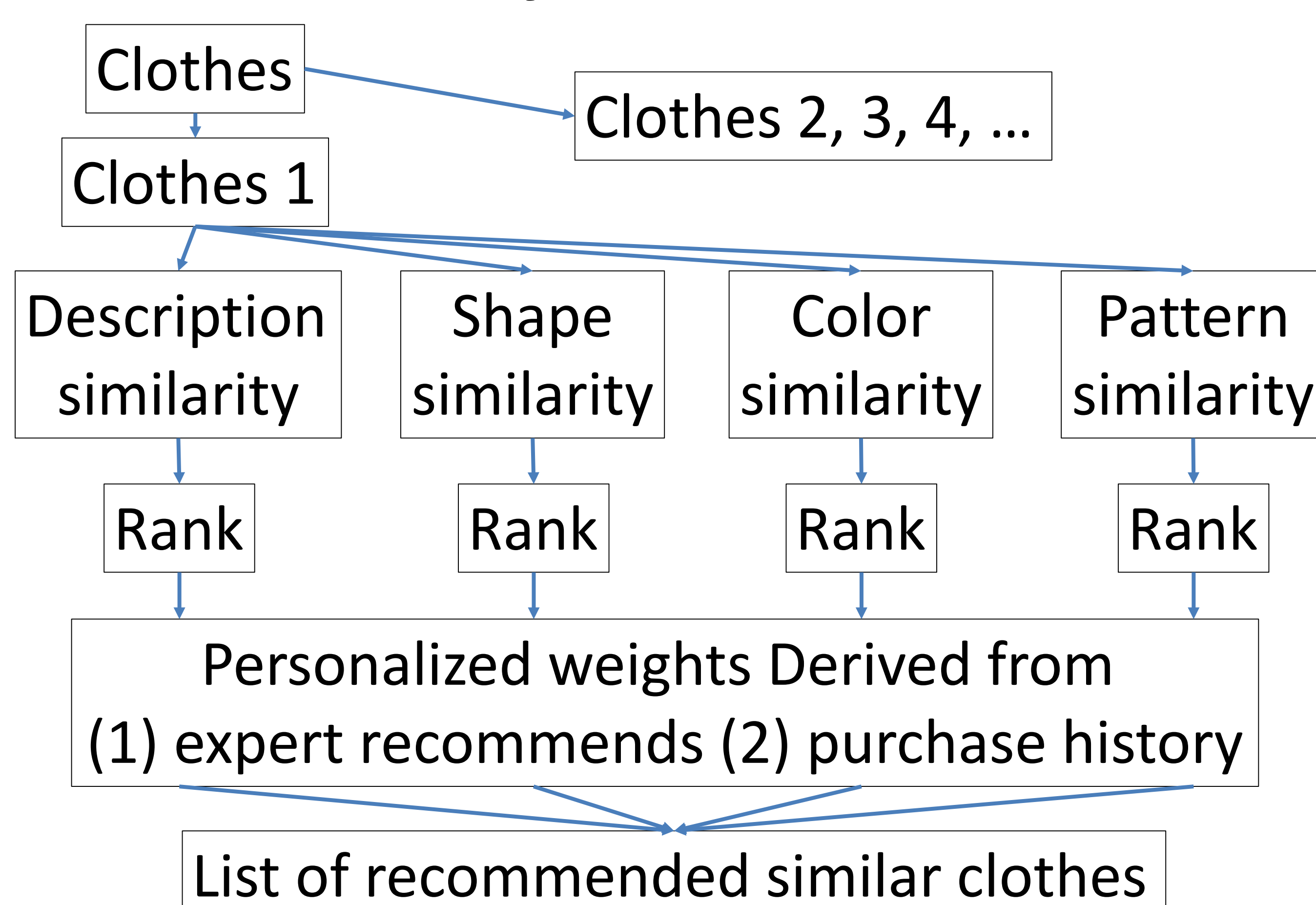


(4) Pattern

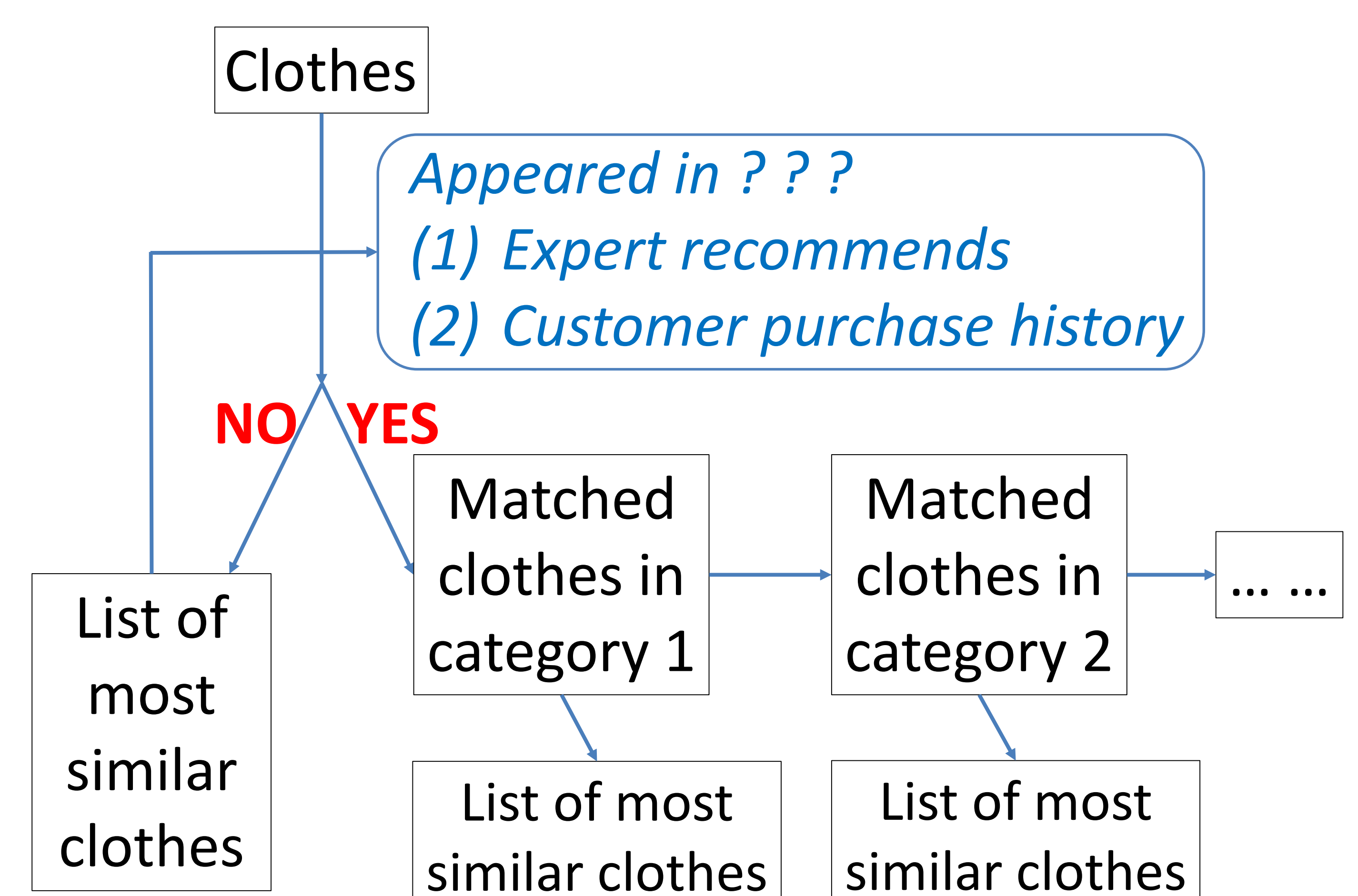


Methodology

Product Similarity



Product Match



Conclusion

- A personalized recommender system
- Consideration of clothes features
 - * Semantic description
 - * Shape
 - * Colour
 - * Pattern
- Similar and matched product recommendation

Future Work

- Interpretable recommendation
- Component detection and segmentation
- Computational efficiency
- Customer classification
- Simulation of customer activities
- Generation of new clothes with customized features
- Extension to other product categories