

## ABSTRAK

Banyaknya pilihan destinasi dan informasi wisata yang tersebar di berbagai platform, seperti media sosial, sering menimbulkan kebingungan bagi wisatawan dalam menentukan tempat wisata yang sesuai dengan preferensi mereka. Teknologi informasi, khususnya sistem rekomendasi, dapat membantu pengguna dalam menemukan destinasi wisata yang relevan berdasarkan minat dan preferensi pengguna. Penelitian ini bertujuan untuk merancang dan membangun sistem rekomendasi tempat wisata di Magelang menggunakan metode *Item-Based Collaborative Filtering (IBCF)* dengan perhitungan *similarity* menggunakan *Pearson Correlation Coefficient (PCC)* berbasis web, serta menguji tingkat akurasi sistem menggunakan metrik *MAE (Mean Absolute Error)*, *Precision*, *Recall*, dan *F1-Score* pada beberapa skenario *Top-N* recommendation. Hasil evaluasi menunjukkan bahwa skenario *Top-10* memberikan performa terbaik dengan nilai *MAE* sebesar 1,003, *Precision* sebesar 0,566, *Recall* sebesar 0,927, dan *F1-Score* sebesar 0,703. Selain itu, hasil uji *usability* menunjukkan nilai *Efficiency* sebesar 77%, *Effectiveness* sebesar 68%, *Engagement* sebesar 82%, *Error Tolerance* sebesar 75%, dan *Ease of Learning* sebesar 62%. Berdasarkan hasil tersebut, sistem rekomendasi yang dibangun mampu memberikan rekomendasi tempat wisata yang cukup relevan dan memiliki tingkat *usability* yang baik bagi pengguna.

**Kata Kunci:** Sistem Rekomendasi, *Item-Based Collaborative Filtering*, *Pearson Correlation Coefficient*, Tempat Wisata.

## ABSTRACT

The abundance of destination options and travel information scattered across various platforms, such as social media, often causes confusion for travelers when deciding on tourist attractions that match their preferences. Information technology, particularly recommendation systems, can help Users find relevant travel destinations based on their interests and preferences. This study aims to design and build a web-based travel destination recommendation system in Magelang using the Item-Based Collaborative Filtering (IBCF) method with similarity calculations based on the Pearson Correlation Coefficient (PCC), as well as to test the system's accuracy using the MAE (Mean Absolute Error), Precision, Recall, and F1-Score metrics across several Top-N recommendation scenarios. The evaluation results show that the Top-10 scenario provides the best performance with an MAE value of 1.003, Precision of 0.566, Recall of 0.927, and an F1-Score of 0.703. Additionally, the usability test results show an Efficiency score of 77%, Effectiveness of 68%, Engagement of 82%, Error Tolerance of 75%, and Ease of Learning of 62%. Based on these results, the developed recommendation system is capable of providing fairly relevant tourist destination recommendations and offers good usability for Users.

**Keywords:** Recommendation System, Item-Based Collaborative Filtering, Pearson Correlation Coefficient, Tourist Attractions.