

## ABSTRACT

*Nowadays, restaurants are very easy to find. Restaurant is a very important need because it's a place to consumption needs or a place for discussion. Confusion to choosing restaurant that has a same taste as ourselves is often a problem. Implementing a recommendation system using an algorithm that studies the data of each other's tastes can be a solution to solve this problem. This thesis implement a recommendation system on the EatAja mobile application using one of the recommender system algorithms, namely memory-based collaborative filtering with the cosine method in finding similarities between users. The cosine method is considered good in comparing a matrix equation because it produces a comparison of values from range 0 – 1. This system uses 286 history data order in EatAja application and combined with 10000 auxiliary data. With a total of 10286 data, with calculations using the Mean Absolute Error (MAE) in evaluating the accuracy of the recommendation system, the result value is 0.96823 and the accuracy value is 99.03%. From the results, it can be concluded that memory-based collaborative filtering can be used to create a recommendation system to increase sales at restaurants in the EatAja application.*

**Keywords:** *Recommender System, Memory-Based Collaborative Filtering, Artificial Intelligence, Food Ordering Service*