## **ABSTRACT**

Indonesia has six sectors that affect economic growth: the transportation and logistics sector, the mining sector, the e-commerce sector, the Small and Medium Enterprises (SMEs) sector, the domestic sector, and the tourism sector. One of the most important economic growth sectors in Indonesia in development is the tourism sector. One of the areas that has the potential to develop the tourism sector, especially nature tourism, is Banyuwangi Regency. Of the several natural tourist destinations in Banyuwangi Regency, there are still many tourist destinations that are not yet known. This requires the design of recommendations for Banyuwangi Regency natural tourism packages. The purpose of this final project is to design a natural tour package recommendation application.

In making recommendations for natural tourism packages in Banyuwangi Regency with the Agglomerative Clustering method in the calculation process. The stages of the process are initialization, distance calculation, cluster merging, forming and cutting the dendrogram according to the cluster. The application is designed using R Studio with the R-Shiny package.

The results of this final project are in the form of a package recommendation application to determine natural tourism packages in Banyuwangi Regency that have been processed and produce clusters from each tourist destination. With the existence of a tour package recommendation application, it makes it easier for prospective tourists to visit these destinations. Therefore, it is hoped that the application design will be able to increase and evenly distribute the percentage of tourists who come to Banyuwangi Regency.

Keywords – Recommendation Application, Agglomerative Clustering, Nature Tourism Package, Banyuwangi Regency