

## **ABSTRACT**

*Along with the rapid development of information technology in the era of globalization, the lifestyle in society has changed. The emergence of information technology and facilities and infrastructure makes technology difficult to separate in society. This development also has an impact on rural communities with the large use of information technology tools and internet services used in villages.*

*The development of information technology in the village opens up opportunities to become a smart village with information technology to achieve increased quality of life, efficiency and competitiveness in economic, social and environmental aspects. With the existence of a smart village, it is hoped that it can help the development of education and learning, so as to create a smart society, through online learning media (E-Learning). E-Learning is not only limited to learning formally, informally, both to exchange knowledge and information between village communities, so that social learning occurs.*

*In this final project, the development of a Social e-Learning application that has been made in previous research by adding a friend recommendation feature is carried out using Artificial Intelligence (AI) through the implementation of the ROCK algorithm clustering method. Applications that have added the friendship recommendation feature will be changed to the Village Social e-Learning application. With the addition of the friend recommendation feature, it is hoped that users of the application can get friend recommendations with an interest in writing similar articles and can exchange information or knowledge with one another.*

*Keywords : E-Learning, Social e-Learning, Artificial Intelligence (AI), clustering, ROCK Algorihm*