## **ABSTRACT**

Practical Work (KP) is one of the compulsory courses in Computer Engineering S1 at Telkom University which contains 2 (two) SKS. Practical work is carried out during the even semester break. The form of activities during practical work follows activities that are within the company that students participate in. Practical work is aimed at third-level students who aim to provide an introduction to the work environment for students. In the flow, students will choose a company that will be used as a practical workplace, then submit it to the faculty by making a submission proposal, after that the faculty will issue a practical work letter that will be taken when students do practical work. However, with so many stages, there are still many students who have difficulty finding references related to practical workplaces, plus the absence of company data records that can be used as references for practical workplaces.

Of the problems that occur, then made a decision support system in order to solve student problems that are difficult to find companies that match their interests. This decision support system was created with a dataset based on previous year's practical work data. This system was designed using the K-Nearest Neighbor classification method using PHP and python languages.

After making this decision support system, the authors conducted a test, one of them using confusion matrix testing. From the test results obtained an accuracy rate of around 30% using different K. The performance of this application is not optimal because the dataset is too small and too random so it can affect the accuracy of the system.

Keywords: internship, machine learning, knn