

## **ABSTRACT**

*Calculating the shortest route plays an important role in daily life because it has to be done and at that time in order to be able to know which one is the shortest route to get through. At least using the shortest route could make daily mobility better. Living in this life is not always in a good health condition, there are times we are in a bad health condition. Health is important. Prevention is better than cure. Therefore, when you are in a bad health condition and that condition really disturb your day, the place that we want to go is hospital for treatment. Especially when there is someone, friends, family, or even yourself are sick. Using the shortest path to the hospital that you want to go will make things better.*

*This application is using the primary road and using the location of hospitals in Bandung. The algorithm is implemented in this Android application. The process of this application are, first location of the user are detected by GPS, and then the location that has been obtained, will be used for the next process. Second, user choose the hospital that they want to go. After that, this application will find the shortest path route with Dijkstra's algorithm. Last, the result of Dijkstra will be displayed on screen.*

*From the results of the testing, dijkstra's algorithm could be implemented on android operating system to compute the shortest route. Average database computation time is 23853.46 ms. Average dijkstra's algorithm computing time to obtain the route is 1046.11 ms. Average total process time is 24899.96 ms.*

**Keyword:** *Android, Dijkstra's algorithm, hospital, Bandung*