**ABSTRACT**

**IMPLEMENTATION OF DYNAMIC PROGRAMMING METHOD**

**IN THE DETERMINATION OF MINIMUM DISTANCE APPLICATIONS**

**By**

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Mathematics and Computer Science are closely related. Many problems that appear in Computer Science’s problems can be solved by using mathematical techniques or concepts. For example, finding the nearest distance, minimum fares, or minimum time. A whole determination of the minimum value can be found by using of mathematical programming, namely dynamic programming. Nevertheless, there are several another consideration factors such as security roads impassable, the vehicle used, comfortability road infrastructure, and others. Dynamic programming is one of the methods in mathematics are useful to create a sequence of interrelated decisions, and provides a systematic procedure to determine the optimal combination of a decision. This paper will discuss about dynamic programming that applied in the determination of the minimum distance. Determination of the minimum distance will use an application to make it easier for calculation.

**Keywords**: mathematics, dynamic programming, minimum distance, application.