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**VEHICLE NAVIGATION SYSTEM BASED ON
SHORTEST PATH**

A PROJECT REPORT PRESENTED BY

W.D.C WEERASINGHE

To the Board in of Study Statistics and Computer Science of the

POSTGRADUATE INSTITUTE OF SCIENCE

In partial fulfillment of the requirement

For the award of the degree of

MASTER OF SCIENCE IN COMPUTER SCIENCE

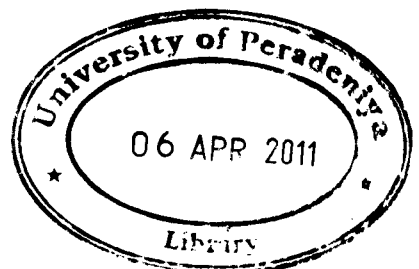
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UNIVERSITY OF PERADENIYA

SRI LANKA

2010

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VEHICLE NAVIGATION SYSTEM BASED ON SHORTEST PATH

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This document is specially designed and prepared based on all the functions carried out in developing a Transport information tool to identify routes of a map on the basis of the shortest distance.

Proposed transport information tool can be adopted in various kinds of transportation management systems to make them more effective and efficient. Efficient transportation management systems are essential for business world to cater to efficient movement of people and goods. The economic importance of Transportation management grows each day. Well-designed and well-managed transportation management systems reduce the traffic and the cost of transportation by minimizing the fuel and energy consumption while saving countless person-hours of driving time.

This project focuses on building a Vehicle Navigation System to identify routes of a map on the basis of the shortest distance to the targeted destination. This system is developed to be given graphical and text based information of the route with total distance for the journey and time taken to travel along the given route between two places within a city. The implemented Vehicle Navigation System was tested by using digitized Colombo city map. The system shows that the targeted aim and objectives are fulfilled successfully by drawing colorful path directing on the map and text based path direction with calculating total time duration for travelling along that path.