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**CONVENIENT METHOD TO MEASURE DISTANCE FOR  
SCHOOL ADMISSION**

A PROJECT REPORT PRESENTED BY

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to the board of study in Earth Sciences of the

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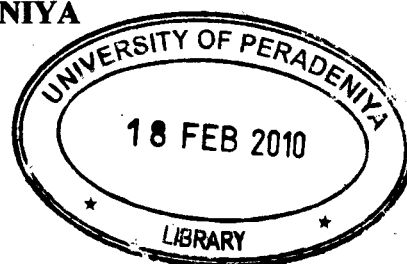
**MASTER OF SCIENCE IN GIS AND REMOTE SENSING**

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## **ABSTRACT**

An attempt was made to introduce convenient method to measure distance for school admission as there is no accurate and transparent method to identify the nearest person from the school. Now a days it has become very competitive for year one school admission due to the variation of demand for the schools. Therefore St. Sylvester's College, Kandy which is a popular school and situated at center of Kandy Town and was selected as base school for this research.

Here, 1: 10,000 digital topographic maps were introduced to identify applicants' residence and to measure distance between school and residence. Because of 1: 50,000 hard copy paper maps are commonly used for that purpose which is not much accurate method. The shortest path distance between school and residence were calculated using ArcMap 9.2 GIS software. Then compare this distance with air distance, which is used to find out nearest person from the school. As a result of this research, it will show the importance of the shortest path distance method for school admission.

Applicants' residence places are checked before the school admission. But the residence were not accurately identified at the field and map. Due to that case calculating the distance between school and residence is difficult. To avoid that problem Global Positioning System was introduced to detect applicants' residence location and insert those location in to the digital map.

The results show that geographically identification of applicants' residence is very important for the school admission and shortest path method is a convenient method to measure distance for school admission.