UNIVERSITI TEKNOLOGI MARA

ANALYSIS OF ROAD ACCIDENT CASES IN PETALING JAYA USING GEOGRAPHICAL INFORMATION SYSTEM (GIS) APPLICATION BETWEEN YEAR 2014 AND 2015

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Disertation submitted in partial fulfillment of the requirements for the degree of Bachelor of Surveying Science and Geomatics (Hons)

Faculty of Architecture, Planning and Surveying

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AUTHOR'S DECLARATION

I declare that the work in this disertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The road accident is one the major problems experienced by every national. According to specialist research about the road accident like Jacobs and Sayer (1983) already give figure for this problem like the road accident has resulted 300,000 to 400,000 fatal every year and the injury risk and death is highest if compared to other accidents. The aim of this study to determine the relationship of the road accident with the population in Petaling Jaya for year 2014 and 2015. Kernel Density Estimation (KDE) method is use for the hotspot accident cases. A kernel density estimation map was created and subsequently disaggregated by cell density to create a basic spatial unit of an accident cases. Therefore, the benefit of this study is to approach implemented in the ESRI ArcGIS environment.

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