

**UNIVERSITI TEKNOLOGI MARA**

**THE POLITICAL GEOGRAPHY OF  
VOTER'S PREFERENCE IN NORTH  
REGION BY GEOGRAPHICALLY  
WEIGHTED REGRESSION (GWR)**

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

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## AUTHOR'S DECLARATION

I declare that the work in this thesis 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.

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## **ABSTRACT**

Politics is the important activity of organized life in society. The geography for political campaigns accentuates and reinforce. Socio political phenomena will be easily understood of spatial relationship. It can use political mapping units as a base mapping in statistics. This study will use the Geographically Weighted Regression (GWR) to exploratory spatial data analysis. This is because the plane parameter use to affect the important parameter, but same weighted. The aim of this study is to investigate pattern of political geography in North Region. This study for this research is at Kedah state because it the suitable plan to politics in GIS. The data are using in this study are election results, demography data and population income using. The methodology to process the data by using Geographically Weighted Regression (GWR) model in the ArcGIS software. GWR will construct separate equation for every feature dataset incorporating the dependent variable. It predicts every feature dataset by regression decision. The result can interpret nonstationarity in the local parameter estimates to visualize of data display. In conclusion, the map will help Election Commission of Malaysia to investigate the more factors contributing to voters in order to effectively manage and arrange strategy in politics Malaysia. It will improve the productivity mapping of political geography.

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