# UNIVERSITI TEKNOLOGI MARA

# THE POSSIBLITY LANDSLIDE AREA AT LOJING, GUA MUSANG USING UAV IMAGE

**MUHAMAD FARHAN**
**BIN ABD RAHMAN**

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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.

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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|---|---|---|
| Name of Student | : | Muhamad Farhan Bin Abd Rahman |
| Student I.D. No. | : | 2015834924 |
| Programme | : | Surveying Science and Geomatic– AP220 |
| Faculty | : | Architecture, Planning and Surveying |
| Thesis | : | The Possibility Landslide Area At Lojing, Gua Musang Using UAV image. |
| Signature of Student | : | …….. |
| Date | : | July 2018 |

# ABSTRACT

The Possibility Landslide Area at Lojing, Gua Musang using UAV Image. The main purpose this project to determine the possibility landslide at Lojing, Gua Musang using Unmanned Aerial Vehicles (UAV) images. There are many factors generally not as exciting or costly as earthquakes, major floods, tropical storms, and other natural disasters. UAV is a remotely piloted aircraft that can be used to collect series of high resolution images from which it is possible to create Digital Terrain Model (DTM) of a landslide. The data UAV image will be process by using Agisoft Photoscan Professional and ArcMap software. Agisoft Photoscan Professional software it also is in raster form to process the DTMs. Based on the performing aerial triangulation using ground control points DTMs can be produced. The Triangular Irregular Networks (TIN) and Slope Map were produced using ArcMAp software in GIS analysis surface Tools software and the processing were in raster data form. The result output the calculation of slope, graph area and percentage the slope area. In conclusion, Taking into consideration of information from slope terrain for the mass movement, it will be selection of landslide areas in refer the ortho-image from the data DEM. The part of this learning is summarize as follow, the detailed UAV collect image and processing image techniques are utilized to provide for the slant strength investigation. The UAV application can be applied in this study providing a perspective on the relevant authorities or departments to apply for landslide monitoring approaches.

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