

**UNIVERSITI TEKNOLOGI MARA**

**TARGET MARKER AS CONTROL POINT IN CRIME  
SCENE MODELING BY USING CLOSE-RANGE  
PHOTOGRAMMETRY**

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

**Faculty of Architecture, Planning and Surveying**

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## **AUTHOR'S DECLARATION**

I declare that the work in this dissertation 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**

Crime scene is one of the most secured place which cannot be access easily and all the evidence and other things in the scene should not be touch or move which could happened in room or open area. The main objective of this paper is the use of the target marker as the control point will determine the exact x,y and z position of the evidences and victims in addition produce 3-dimensional modelling. Approximately two or more control points using target marker which the positions are justify by using handheld application which is "Easy GPS" will be located at the corner of the room by using close range photogrammetry. By using Photomodeler Scanner and Agisoft Photoscan software, the positions of the evidences and victims can be transferred from control points. At the same time, the 3-dimensional modelling can be developed and the evidences and victims can be measured. The accuracy of the measurement compared with conventional measurement by using ruler. In conclusion, this study provides a vital step in forensic mapping applications for police investigators. It provides the practical solution to mapping crime scene by using close-range photogrammetry methodology.

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