

UNIVERSITI TEKNOLOGI MARA

**ASSESSMENT ON 3D
RECONSTRUCTION OF VEHICLE
DAMAGE BY USING CLOSE RANGE
PHOTOGRAMMETRY**

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of the requirements for the degree of
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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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ABSTRACT

Total of road accident rose surprisingly during festive season. In addition, road accidents may lead in injury, death or property damage. The relevant of the study may assist in determining the percentage of the car damage for cost estimation. At the end of study, based on the outcome, it can provide the solving and methodology to analyze vehicle damage and achieving the cost estimation of vehicle deformation. This study examined the percentage of vehicle damage from front side. The percentage obtained used for cost estimation. A simple surveyed done to workshop to be know the real price based on the damaged, and then compared the cost. The aim of this study is to analyse vehicle damage to gain the percentage of damage for getting with the real cost. Data used in this study obtained by using close range photogrammetry method. A vehicle image captured, and then processed into Photomodeler. Percentage computation done by referring the amount of volume of damage before and after the vehicle accident. Last for estimating cost by comparing to the real price at workshop. In conclusion, the expected result shows 3D image of rear vehicle component, percentage of damages and cost. As for contribution this study helps the car owner when having an accident or insurance companies evaluating the material damages caused by a traffic accident, includes the accurate knowledge of the vehicle body deformations and the degree of car damages. Besides, it helps in cost estimation for car damage to get repaired.

TABLE OF CONTENT

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENT	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Research Background	1
1.2 Research Gap	3
1.3 Problem Statement	6
1.4 Aim	7
1.5 Objectives	7
1.6 Research Questions	8
1.7 General Methodology	8
1.8 Significant of Study	9
1.9 Thesis Organization	9
1.10 Summary	10
CHAPTER TWO: LITERATURE REVIEW	17
2.1 Introduction	17
2.2 Photogrammetry Theory	18
2.3 Photogrammetry Process	14
2.4 Close Range Photogrammetry	15
2.5 Camera Calibration	18
2.6 Camera Station Configurations	20
2.7 Road Accident and Loss	21

2.8	Digital Close Range Photogrammetry in Vehicle Accident Reconstruction	22
2.9	3D Image Photogrammetry Vehicle Crash	23
2.10	3D Image Photogrammetry Vehicle Crash	25
2.11	Photomodeler Scanner (PMS) Software	25
2.12	DSLR	27
2.13	Summary	28

CHAPTER THREE: RESEARCH METHODOLOGY **30**

3.1	Introduction	30
3.2	Methodology	30
3.3	Preliminary Work and Project Planning	320
3.4	Study Object	33
3.5	Data Processing	35
3.5.1	Camera Calibration	36
3.5.1.1	Basic	37
3.5.1.2	Automatic Camera Calibration	38
3.5.1.3	Image correction	38
3.5.2	Modelling car damage	39
3.5.2.1	SmartMatch	40
3.5.2.2	Referencing	40
3.5.2.3	Dense Surface Modelling	41
3.5.2.4	PointMesh Edit	41
3.5.2.5	Volume Measurement	41
3.5.3	Cost Estimation	419
3.6	Data Analysis	44
3.7	Summary	44

CHAPTER FOUR: RESULTS AND DISCUSSION ON 3D RECONSTRUCTION OF VEHICLE DAMAGE BY USING CRP **45**

4.1	Introduction	45
4.2	Camera Calibration	45
4.3	Control Point	46
4.4	Reconstruction 3D modelling of vehicle damage	47