

UNIVERSITI TEKNOLOGI MARA

**BUILDING 3D MODELLING OF UITM
ARAU PERLIS CAMPUS USING AGISOFT
SOFTWARE**

**NUR FARAHIZYAN BINTI MOHD ASERI
2015145337**

**FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA**

JANUARY 2019

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.

Name of Student : Nur Farahizyan Binti Mohd Aseri

Student I.D. No. : 2015145337

Programme : Bachelor Of Surveying Science And Geomatics(
HONOURS)– AP220

Faculty : Architecture , Planning And Surveying

Choose an item. : Building 3D Modelling Of UITM Arau Perlis ampus
Using Agisoft Software

Signature of Student :

Date : January 2019

ABSTRACT

3 dimensional modelling or known as 3D modelling is one of the latest technology in surveying fields. The creation of 3D modelling can be differing according to the purpose and user needs. One of the methods that can be used to produce 3D modelling is by using Unmanned Aerial Vehicles (UAV) that is also one of the branches in photogrammetry techniques. However, choosing the suitable software can be a challenging task in building 3D modelling especially for the large campus area. As the second largest UITM Campus in Malaysia, UITM Arau Perlis Campus offer variety of building structure and landscape. The Aim and objective of this study is to visualise the 3D modelling of the campus using Agisoft Software and also to imposed in the Google Earth. As a result of this study the capability of this study is discovered. This study hopefully be able to help in understanding the Agisoft Software and how it works in modelling buildings.

TABLES OF CONTENTS

AUTHOR’S DECLARATION

ABSTRACT

ACKNOWLEDGEMENT

TABLES OF CONTENTS

LIST OF TABLES

LIST OF FIGURE

CHAPTER ONE	1
INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statements	2
1.3 Research And Objectives	2
1.4 Significant Of Study	3
1.5 Scope And Limitation Of Research	3
1.6 Target User	5
1.7 Chapter Outline	5
 CHAPTER TWO	 6
LITERATURE REVIEW	6
2.1 Introduction	6
2.2 3d Modelling	6
2.2.1 Application Of 3D Modelling	7
2.2.2 3D Models Used In Community Health Clinics	7
2.2.3 3D Application For Historical Building	7
2.2.4 3D Modelling For Crime Scene	8
2.2.5 3D Modelling For Road Safety	9
2.2.6 3D Modelling For Constructions	9
2.2.7 3D Modelling For Crowd Simulation In Building	10
2.3 Photogrammetry	11

CHAPTER FOUR	38
RESULTS AND ANALYSIS	38
4.1 Introduction	38
4.2 3d Modelling Visualisation	38
4.3 Generate Models From Agisoft Into Google Earth	43
4.4 Determination Of Accuracy Assessment	44
4.5 Summary	50
 CHAPTER FIVE	 51
CONCLUSION AND RECOMMENDATION	51
5.1 Introduction	51
5.2 Conclusion	51
5.3 Recommendation	52
 BIBLIOGRAPHY	 53