**Bsc (Hons) in Software Design with Virtual**

**Reality and Games**

**Student Name:** Andris Orna

**AIT Student number:** A00129244

**Assignment: CA Submission**

**Date of Submission: 03/12/2021**

# STUDENT PLAGIARISM DISCLAIMER FORM

## PLAGIARISM DISCLAIMER

STUDENT NAME: Andris Orna\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STUDENT NUMBER: A00129244\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PROGRAMME: BSc (Hons) in Software Design with Virtual Reality and Games\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

YEAR: 3\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MODULE: Game Hardware\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

LECTURER: Mark Daly, Jeremiah\_Scully\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ASSIGNMENT TITLE: CA Submission\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DUE DATE: 17/12/2021\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE SUBMITTED: 17/12/2021\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ADDITIONAL INFORMATION: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I understand that plagiarism is a serious academic offence, and that AIT deals with it according to the AIT Policy on Plagiarism.

I have read and understand the AIT Policy on Plagiarism and I agree to the requirements set out therein in relation to plagiarism and referencing. I confirm that I have referenced and acknowledged properly all sources used in preparation of this assignment. I understand that if I plagiarise, or if I assist others in doing so, that I will be subject to investigation as outlined in the AIT Policy on Plagiarism.

I understand and agree that plagiarism detection software may be used on my assignment. I declare that, except where appropriately referenced, this assignment is entirely my own work based on my personal study/or research. I further declare that I have not engaged the services of another to either assist in, or complete this assignment.

## Signed:



**Dated: 17/12/2021**

1. Screen Captures/Video Segments/Saved Images of the object detection undertaken.

Links to original images:

<https://upload.wikimedia.org/wikipedia/commons/c/cc/NASA_Astronaut_Group_18.jpg>

I. If external images/videos are used, links to the original images should be included.

II. Samples of images per classification type should be provided; e.g. if face detection and license plate detection was undertake, then appropriate images of each classification should be provided.

**Xml files explain**

2. In terms of the software used:

I. A tech stack should be submitted. This list to include the OS type, Environment used (with version number), Packages used (e.g. OpenCV, Numpy, Scikit-learn, etc.) with versions numbers, language distribution (e.g. Anaconda), etc.

**Anaconda**

II. A list of classifiers used (e.g. haarcascade\_frontalface\_default.xml, haarcascade\_eye.xml, lbpcascade\_frontalface\_improved.xml, etc.)

III. The Python code used in the detections.

3. A brief report of the work done. This to include

I. An overview of the work done.

II. The choice of detections realised and the reasons for choosing these detection types; e.g. if you decided to detect cats in images, why you chose this classifcation type and where you ontained the trained classifiers.

III. Issues and problems encoutered.

IV. Conclusions reporting what you learned using Python and OpenCV, etc.