

Configuration Manual

MSc Research Project Cyber Security

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MSc Project Submission Sheet

	School Liston Pallippattu Mathai	of Computing	
Student Name:			
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Student ID:			
	Cyber Security		2020-2021
Programme:			
	Msc Research Project		
Module:			
	Imran Khan		
Supervisor:			
Submission	16-August-2021		
Due Date:			
	Malware detection on android u	sing Adaboost algorithm	
Project Title:	:		
Word Count	:Page Count	t	

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

<u>ALL</u> internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature:							
	16-08-2021						
Date:							

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

Attach a completed copy of this sheet to each project (including multiple copies)	
Attach a Moodle submission receipt of the online project submission, to each	
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Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

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Signature:	
Date:	
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Malware detection on android using Adaboost algorithm

Liston Pallippattu Mathai

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1 Introduction

Document discusses how the mobile android malware detection code should be implemented and executed. Work has been coded in Python programming language.

2 System Requirements

Tool: Python IDLE

Python: version3

Operating System: Windows 7 or later

Anaconda has been downloaded and installed on the system. It can be downloaded from the official website of Anaconda,

(https://www.anaconda.com/products/individual)

At the stage given in the image below check both checkboxes

-

2.1 Package Details

Various packages and libraries are installed to perform the research they are as follows,

Pandas : Used to read the data set, that is the dataset.

Numpy : Used for array operations

Pickle : Used to save the model

Metrics : calculate and print the accuracy

Selectkbest : Used for the selection of features

3 Setting up the environment

- Extract Android malware full code.zip file
- Extract tf.zip file to location C->users->user(it may be vary based on your system)- >anaconda3->envs
- Open anaconda prompt in the project folder
- Run command : activate tf

4 Data Sources

Dataset used for this research is taken from a public online platform named Kaggle which allow users to access and download different malware data set samples. Data set has been downloaded and added to the submitted Zip file named Derbian.

5 Code Execution

Anaconda prompt has been opened and run the following commands,

• Run command: python training.py \parallel To train the model

	Anaconda Prompt (anac	onda3)							_		\times
[0]											^
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5	0	0	0			e		0	S		
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[5	rows x 216 columns										\sim

• Run command: python testing.py || Run the trained model against the validation data



• Run command: python Gui.py || To run the trained model against the sample which provides the result on the GUI



6 References

- [1] "Download python latest version," https://www.python.org/downloads/.
- [2] " https://www.anaconda.com/products/individual