THREAT PREDICTION USING HONEYPOT AND MACHINE LEARNING

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

BY

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XAVIER INSTITUTE OF ENGINEERING

UNIVERSITY OF MUMBAI

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CERTIFICATE

This to certify that

MELVIN RAJU	(XIEIT181927)
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CHANDRAKANT THAKUR	(XIEIT181956)

Have satisfactorily carried out the PROJECT work titled **"Threat Prediction Using Honeypot and Machine Learning"** in partial fulfillment of the degree of Bachelor of Engineering as laid down by the University of Mumbai during the academic year 2020-2021

Suvarna Aranjo

Supervisor/Guide

Prof. Meena Ugale **Dr. Y.D Venkatesh**

Head of Department **Principal**

PROJECT REPORT APPROVAL FOR B.E.

This project report entitled "THREAT PREDICTION USING HONEYPOT AND MACHINE LEARNING"

By

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is approved for the degree of BACHELOR OF ENGINEERING.

Examiners

1. _____

2. _____

Supervisors

1. _____

2. _____

Date:02/11/2021

Place: MAHIM, MUMBAI

DECLARATION

I declare that this written submission represents my ideas in my own words and where others' Ideas or words have been included; I have adequately cited and referenced the original sources.

I also declare that I have adhered to all the principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which thus have not been properly cited or from whom proper permission have not been taken when needed.

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Date:02/11/2021

TABLE OF CONTENTS

LIST OF FIGURES

ABSTRACT

Real-time detection and response is one of the most effective way to cyber threats introduced to servers and clients by aggressive, intelligent and sometime real-time attackers. Every node in the network is considered to be a weak point for a potential attacker to take advantage of. Therefore detection and response at endpoint must be extremely effective to erradicate any chances of exposure of such weak points to potential attackers. So as to shift from a traditional approach which fails to detect diverse attack scenarios to a more smart, intelligent way and introduce machine learning to many techniques used to detect and prevent unauthorised access to systems. Thus we look at multiple techniques for different scenarios and advantages of the same.

Acknowledgement

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