AN INTELLIGENT SYSTEM USING AI/ML TO DETECT PHISHING DOMAINS

A PROJECT REPORT

Submitted by,

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Under the guidance of,

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in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING AT

PRESIDENCY UNIVERSITY BENGALURU DECEMBER 2024

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report **AN INTELLIGENT SYSTEM USING AI/ML TO DETECT PHISHING DOMAINS** being submitted by Hema Deepika Mikkili(20211CSE0324), Isha Bhardwaj(20211CSE00331), in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled in **AN INTELLIGENT SYSTEM USING AI/ML TO DETECT PHISHING DOMAINS** partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering,** is a record of our own investigations carried under the guidance of **Dr. Pamela Vinitha Eric Professor, School of Computer Science Engineering Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

Hema Deepika Mikkili

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ABSTRACT

Phishing attacks have become a significant cybersecurity threat, with attackers using deceptive domains to steal sensitive information. This project presents an intelligent system leveraging Artificial Intelligence (AI) and Machine Learning (ML) to detect phishing domains with high accuracy. The system analyzes various features of a domain, including URL structure, lexical characteristics, and hosting details, to classify it as legitimate or malicious. Advanced ML algorithms such as decision trees, random forests, and deep learning models are employed to enhance detection efficiency. The proposed solution aims to provide real-time threat identification, reducing the risk of cyber fraud and improving online security. Experimental results demonstrate the effectiveness of the system in identifying phishing domains with high precision and recall.

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