Thesis Report

On

"Suicidal Tendency Prediction Using Machine Learning"

Submitted By

Sanjoy Roy
ID: 190322074

Md. Manik Mia
ID: 190322079

Abdul Kuddus
ID: 190322040

Mst.Fatematuz Zuhura
ID: 190322009

Pritam Kumar Kundu
ID: 190322014

Md. Jahidul Islam
ID: 180322033

Md. Refat Hossen
ID: 190322006

Supervised by

Khandaker Iftakher Ahmed

Lecturer

Department of Computer Science and Engineering

This project submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering.

Department of Computer Science and Engineering

European University of Bangladesh

2/4, Gabtoli, Mirpur, Dhaka-1216

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CANDIDATE'S DECLARATION

This is to certify that the work presented in this Thesis, titled, "Suicidal Tendency Prediction Using Machine Learning" is the outcome of the investigation and research carried out by us under the supervision of Khandaker Iftakher Ahmed. It is also declared that neither this project nor any part thereof has been submitted anywhere else for the award of any degree, diploma or other qualifications.

Sanjoy Roy

Student ID: 190322074

Abdul Kuddus

Student ID: 190322040

Pritam Kumar Kundu

Student ID: 190322014

Md. Refat Hossen

Student ID: 190322006

Md. Manik Mia

Student ID: 190322079

Mst.Fatematuz Zuhura

Student ID: 190322009

Md. Jahidul Islam

Student ID: 180322033

CERTIFICATE OF APPROVAL

This Thesis titled, “Suicidal Tendency Prediction Using Machine Learning Algorithm” submitted by the group as mentioned in the candidates’ declaration page has been accepted as satisfactory in partial fulfillment of the requirements for the degree B.Sc. in Computer Science and Engineering in December-2022.

Signature of Supervisor:

Khandaker Iftakher Ahmed

Lecturer

Department of Computer Science and Engineering

European University of Bangladesh, Dhaka, Bangladesh.

Signature of Chairperson:

Md. Obaidur Rahman

Associate Professor & Chairman

Department of Computer Science and Engineering

European University of Bangladesh, Dhaka, Bangladesh

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ABBREVIATIONS

ML = Machine Learning.

JS = Java script.

MERN = MySQL, Express, React, Node.

SRBs = Suicide-Related Behaviors.

NLP = Natural Language Processing.

DNN = Deep Neural Networks.

HTML = Hypertext Markup Language.

WEB = World Wide Web.

REST = Representational State Transfer.

API = Application Programming Interface.

HTTPS = Hypertext Transfer Protocol Secure.

UI = User Interface.

CRUD = Create Read Update Delete.

XML = Extensible Markup Language.

JSON = JavaScript Object Notation.

SQL = Structured Query Language.

ES6 = EcmaScript 6.

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ABSTRACT

Suicida1 Tendency Prediction utilizing data from Social Media is a recent factor that influences suicide-related event behavior. Suicide is the world's eleventh leading cause of death, according to the World Health organization (WHO). Suicide identification is influenced by societal and environmental factors as well as individual factors. Suicide has recently become a 'social' menace. Some question is rapidly being explored as a source that shows and detects a person's psychological status. The goal of this work is to check if Question about suicides can be categorized based on their content. This is accomplished through the repetitive application of deep learning and machine learning algorithms, as well as the involvement of coders. Question data has been scrutinized for a series of suicide words and remarks using the public API. Suicide related questions are gathered using keywords connected to suicide and saved in a database, which serves as the dataset. A recursive neural network is then used to classify these questions in order to determine whether or not a suicide can take place. The proposed model identifies users who have a proclivity for suicide, referred for psychiatric care, thereby benefiting them and potentially saving their lives.