**DETERMINATION OF GENUINENESS OF A MEDICAL PROFESSIONAL**

**Blank Sheets:**

In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the thesis.

**DETERMINATION OF GENUINENESS OF A MEDICAL PROFESSIONAL**

Submitted in partial fulfillment of the requirements

of the degree of

**B. E. Computer Engineering**

By

**Aayush Shah 60004140091**

**Pranay Shah 60004140101**

**Dipam Vasani 60004140116**

Guide(s):

**Kriti Srivastava**

Assistant Professor

|  |  |  |
| --- | --- | --- |
| D:\Admission\Admissions_1011\wwwroot\hdrlogo.gif | Department of Computer Engineering  D. J. Sanghvi College of Engineering  Mumbai – 400 056 | E:\new logo.JPG |

University of Mumbai

2017-2018

**INSIDE**

**PAGES**

**[See General instructions for page setup & other instructions]**

**CERTIFICATE**

This is to certify that the project entitled **“Determination of genuineness of a medical professional”** is a bonafide work of **“Aayush Shah” (60004140091), “Pranay Shah” (60004140101), “Dipam Vasani” (60004140116)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of B.E. in Computer Engineering

**Prof. Kriti Srivastava**

**Internal Guide**

**Dr. N. M. Shekokar Dr. Hari Vasudevan**

**Head of Department Principal**

i

**Project Report Approval for B.E.**

This project report entitled ***Determination of genuineness of a medical professional*** by ***Aayush Shah, Pranay Shah, Dipam Vasani*** is approved for the degree of ***B.E. in Computer Engineering.***

Examiners

1.---------------------------------------------

2.---------------------------------------------

Date:

Place:

ii

Declaration

I/We declare that this written submission represents my/our ideas in my/our own words and where others' ideas or words have been included, I/We have adequately cited and referenced the original sources. I/We also declare that I/We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my/our submission. I/We 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 have thus not been properly cited or from whom proper permission has not been taken when needed.

-----------------------------------------

(Signature)

-----------------------------------------

(Name of student and Roll No.)

Date:

iii

**Abstract**

In the age, where any data is easily available, it is of utmost importance that the data accessed by a person, isn’t used for malicious purposes, or more importantly the data isn’t in the wrong hands. This is even more important when the data is about an individual’s health and medical history. Often, we hear about cases wherein a medical professional misused a person’s past medical history. So, we thought of determining a medical professional’s genuineness, and letting the results of this project out to the public, to help them decide whether or not, to consult a doctor. These results would solely be based upon the genuineness of a medical professional’s intentions. In this work, we discuss the design and implementation of the proposed project, using Fuzzy Logic and Neural Networks. Factors like the location from which a medical professional accesses data, relevance of the data being accessed to the ailment/treatment, etc. would serve as inputs to the Neural Network, and using Error Back Propagation Technique, the Network would be trained for a variety of inputs, finally, displaying the genuineness of a medical professional as a numerical value between zero and hundred.

iv

**Contents**

|  |  |  |
| --- | --- | --- |
| **Chapter** | **Contents** | **Page No.** |
| **1** | **INTRODUCTION** |  |
|  | **1.1 Description** |  |
|  | **1.2 Problem Formulation** |  |
|  | **1.3 Motivation** |  |
|  | **1.3 Proposed Solution** |  |
|  | **1.4 Scope of the project** |  |
| **2** | **REVIEW OF LITERATURE** |  |
| **3** | **SYSTEM ANALYSIS** |  |
|  | **3.1 Functional Requirements** |  |
|  | **3.2 Non Functional Requirements** |  |
|  | **3.3 Specific Requirements** |  |
|  | **3.4 Use-Case Diagrams and description** |  |
| **4** | **ANALYSIS MODELING** |  |
|  | **4.1 Data Modeling** |  |
|  | **4.2 Activity Diagrams / Class Diagram** |  |
|  | **4.3 Functional Modeling** |  |
|  | **4.4 TimeLine Chart** |  |
| **5** | **DESIGN** |  |
|  | **5.1 Architectural Design** |  |
|  | **5.2 User Interface Design** |  |
| **6** | **CONCLUSION** |  |
|  |  |  |

Appendix

Literature Cited

Publications by your group (if any)

Acknowledgements

v

**List of Figures**

|  |  |  |
| --- | --- | --- |
| **Fig. No.** | **Figure Caption** | **Page No.** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

vi

**List of Tables**

|  |  |  |
| --- | --- | --- |
| **Table No.** | **Table Title** | **Page No.** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

vii

**List of Abbreviations**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Abbreviation** | **Expanded form** |
| i | DSS | Decision Support System |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

viii