SMART INDIA HACKATHON 2022

Basic Details of the Team and Problem Statement

Ministry/OrganizationName/StudentInnovation:Ministry of Electronics and Information Technology (MEITY)

PS Code:PK854

Problem Statement Title: Identifying the Dyslexia, Dyscalculia, Dysgraphia, Dyspraxia, Autism or ADHD in school going children.

Team Name: The Avengers

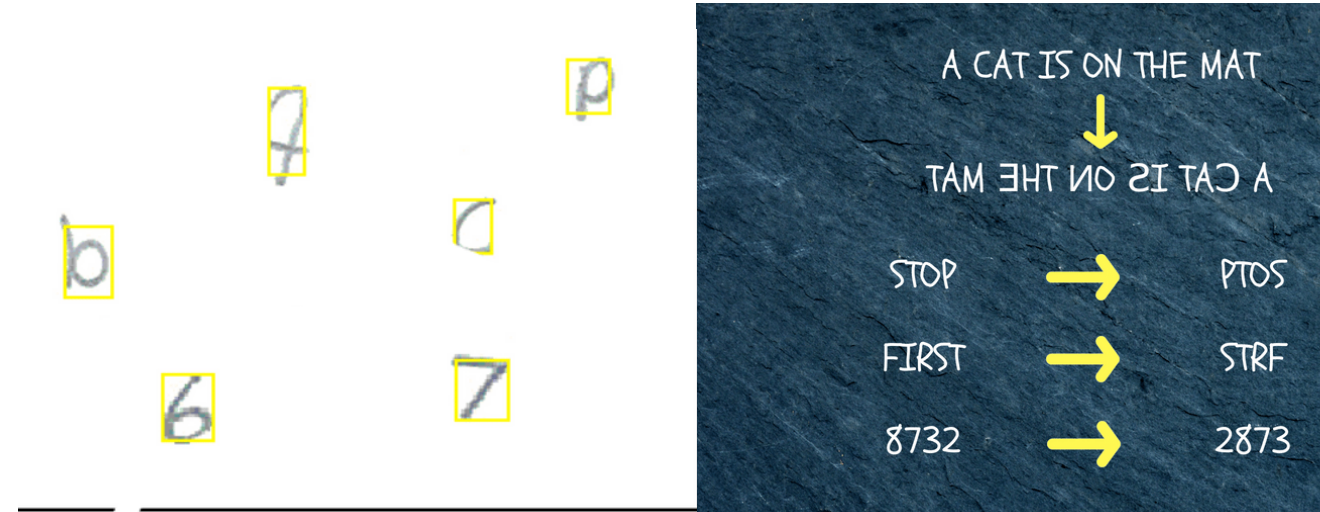Team Leader Name: Suraksha

Institute Code:C-7036

Institute Name: AMRITA SCHOOL OF ENGINEERING

Theme Name:SMART EDUCATION

Idea/Approach Details

Solution

- **Detection of Dyslexia , Dysgraphia and Children without the writing disorders via multi-image classification**

- **Database containing images of disorders handwriting which is compared to the one from the user and shows the percent of his dyslexia.**

- **APPLICATION: The proposed automated detection system is developed by using pattern recognition technique. Based on their handwriting images, the pattern recognition system will detect and extract the features of the written characters using Optical Character Recognition (OCR).**

A CAT IS ON THE MAT
↓
TAM ƎHT NO ƧI TAƆ A

STOP → PTOS
FIRST → STRF
8732 → 2873

Describe your Technology stack here:

➢ Jupyter
➢ Javascript
➢ Python
➢ APIs
➢ HTML
➢ CSS

Idea/Approach Details

Describe your Use Cases

- **DATA ACQUISITION**

- **IMAGE CONVERSION**

- **PRE-PROCESSING**

- **SEGMENTATION**

- **CLASSIFIER AND RESULT**

Describe your Dependencies
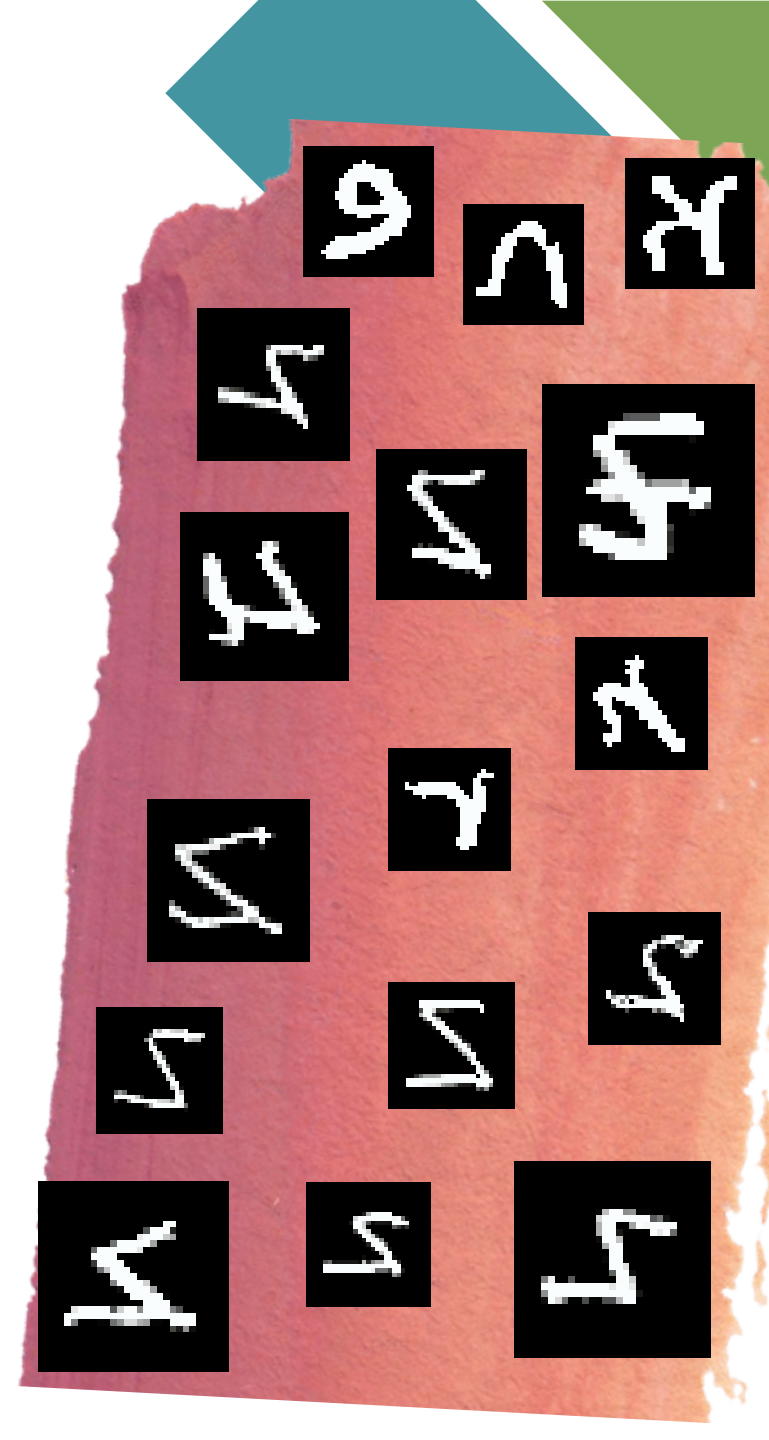
TENSOR FLOW

RESNET 50

IMAGEAI CLASSIFICATION

KERAS

Streamlit

Pipeline

We used streamlit and then deployed the app made of python scrpt

Team Member Details

Team Leader Name: Suraksha Rajagopalan
Branch : Btech   Stream : EAC   Year I

Team Member 1 Name: Rohit Rajesh Nair
Branch : Btech   Stream : ELC   Year I

Team Member 2 Name: Pranav Krishna U
Branch : Btech   Stream : AIE   Year I

Team Member 3 Name: Krishnendu Nambiar Radhakrisnan
Branch : Btech   Stream : CSE   Year I

Team Member 4 Name: Gajji Mohit Yadav
Branch : Btech   Stream : AIE   Year I

Team Member 5 Name: Harinandan K
Branch : Btech   Stream : EAC   Year I

Team Mentor 1 Name: Geetha Ganesh
Category : Academic   Expertise : Computer vision,Machine learning,Deeplearning   Domain Experience :   PhD in computer vision,
                                                                                                Funded project sign language
                                                                                        recognition,30 papers in the area of AI/ML
Team Mentor 2 Name: Gopakumar G
Category : Academic   Expertise : AI,ML   Domain Experience : Computer Vision