2252-ASDS-5305-001-DEEP LEARNING/NEURAL NETWORKS

FPA_1

Group Details:

Group Members:

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Datasets Selected:

01

Dataset   : AI Generated Images Detection

Goal   : To construct a model capable of detecting AI-generated images.

Problem type   : Binomial Classification

Target Labels   : label {0 AiArtData , 1 RealArt}

Link to dataset   : AI-Generated-vs-Real-Images-Datasets

Explanation: This dataset comprises images generated by artificial intelligence (AI) and real art with respective labels. The primary objective of this project is to construct a model capable of detecting AI-generated images.

02

Dataset   : Speech Emotion Recognition

Goal   : To recognize human emotion and affective states from speech.

Problem type   : Multiclass classification

Target labels   : Emotion {NEU = neutral, CAL = calm, 03 = HAP, SAD = sad,
                         ANG = angry, FEA = fearful, DIS = disgust, SUR = surprised}

Link to dataset   : Speech Emotion Reaction

Explanation: This dataset comprises speech samples generated by various artists with different emotions. The primary objective of this problem is to train a model which is capable of detecting the emotion of an unseen speech sample.

03

Dataset   : Sentiment Analysis for Mental Health

Goal   : To develop a model capable of analyzing and classifying sentiments expressed in mental health-related textual data.

Problem type   : Multiclass Classification

Target Label   : {0: Normal, 1: Depression, 2: Suicidal, 3: Anxiety, 4: Stress, 5: Bipolar Disorder, 6: Eating Disorder}

Link to dataset   : [Sentiment Analysis for Mental Health](#)

Explanation: This comprehensive dataset is a meticulously curated collection of mental health statuses tagged from various statements. The dataset amalgamates raw data from multiple sources, cleaned and compiled to create a robust resource for developing chatbots and performing sentiment analysis.

Data Sources:
The dataset integrates information from the following Kaggle datasets:
3k Conversations Dataset for Chatbot
Depression Reddit Cleaned
Human Stress Prediction
Predicting Anxiety in Mental Health Data
Mental Health Dataset Bipolar
Reddit Mental Health Data
Students Anxiety and Depression Dataset
Suicidal Mental Health Dataset
Suicidal Tweet Detection Dataset

Code on GitHub repository -> https://github.com/aj-kanumala/deeplearing-ann-project