

RSTV-2024

Problem Statement- Generating Clear Speech From Speech Impaired Audio

Brief Description- The goal of this project is to develop a system for generating clear speech from speech impaired data. The process involves converting audio files containing impaired speech into text while extracting relevant features that show errors in impaired data.

Deliverables:

1. **Preprocessed and annotated Dataset:** Curating, cleaning and organising a meticulously prepared dataset of disordered speech samples for training and evaluating the machine learning model
2. **Machine Learning model to process disordered speech:** Train the model using the cleaned dataset, employing techniques like feature extraction and classification to effectively distinguish and analyze speech disorders
3. **Application to convert disordered speech input into non disordered speech in the speakers original voice:** Application that takes input in the form of disordered speech and utilizes the trained machine learning model to convert it into non-disordered speech. The application should aim to preserve the original voice characteristics of the speaker while rectifying speech impairments.