Prerequisites

Below are the prerequisites needed to reproduce the experiments performed while creating the SER FusionNet model. Required data and notebooks for the two experiments using RAVDESS and SER Superset performed is mentioned below.

Note:

* Ensure that the code is run as a Kaggle notebook as the data source links in the code are provided accordingly. This would also ensure that the high sized audio datasets need not be downloaded to local directory
* The dataset links mentioned below needs to be added to the working directory of the Kaggle notebook

1. **Speech Emotion Recognition on Ravdess Dataset**

**Python Notebooks:**

* ser-ravdess-crossvalidation.ipynb
* ser-ravdess.ipynb

## **Dataset link - Ryerson Audio-Visual Database of Emotional Speech and Song (RAVDESS):**

## <https://www.kaggle.com/datasets/uwrfkaggler/ravdess-emotional-speech-audio>

1. **Speech Emotion Recognition on SER Superset Dataset (Ravdess+Crema+Savee+Tess)**

**Python Notebooks:**

* ser-superset-crossvalidation.ipynb
* ser-superset.ipynb

**Dataset links - Ryerson Audio-Visual Database of Emotional Speech and Song (RAVDESS)**

## <https://www.kaggle.com/datasets/uwrfkaggler/ravdess-emotional-speech-audio>

**Crowd Sourced Emotional Multimodal Actors Dataset (CREMA-D)**

<https://www.kaggle.com/datasets/ejlok1/cremad>

**Gender Mapping for Crema-D**

<https://www.kaggle.com/datasets/jananiravikumar1/gender-for-crema>

# **Surrey Audio-Visual Expressed Emotion (SAVEE)** <https://www.kaggle.com/datasets/ejlok1/surrey-audiovisual-expressed-emotion-savee>

# **Toronto emotional speech set (TESS)** <https://www.kaggle.com/datasets/ejlok1/toronto-emotional-speech-set-tess>