**UCS749: Conversational AI: Speech Processing and Synthesis**

**LAB EVAL 1**



Computer Science and Engineering Department

Thapar Institute of Engineering and Technology

(Deemed to be University), Patiala – 147004

Submitted By:

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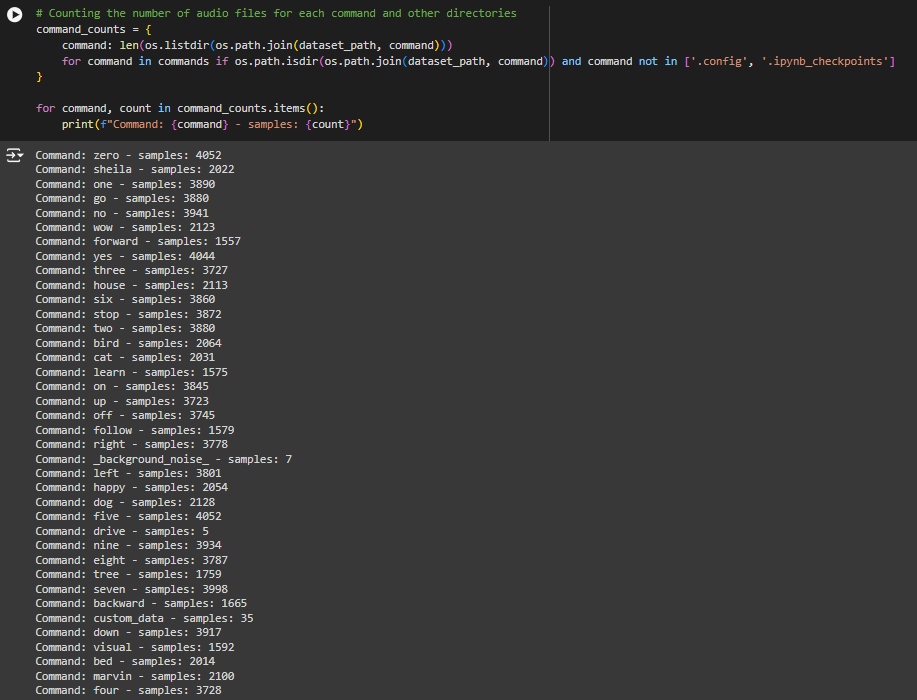
Submitted To:

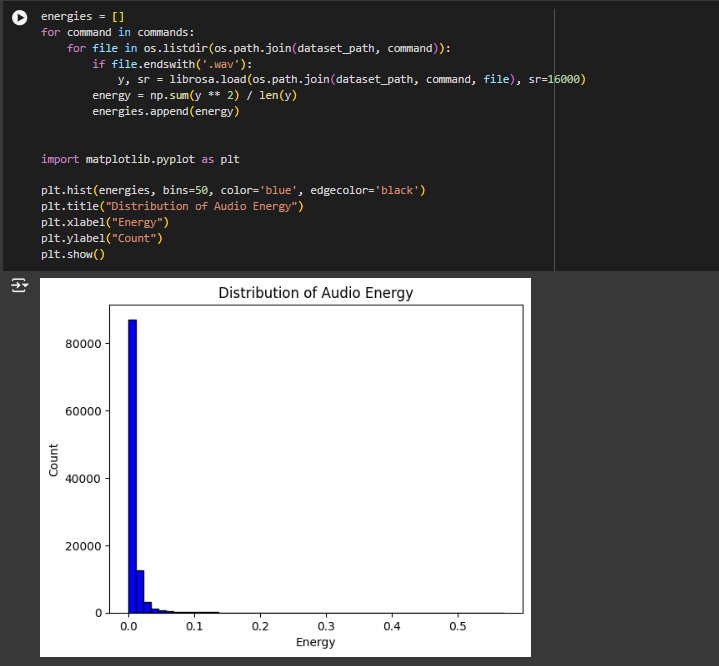
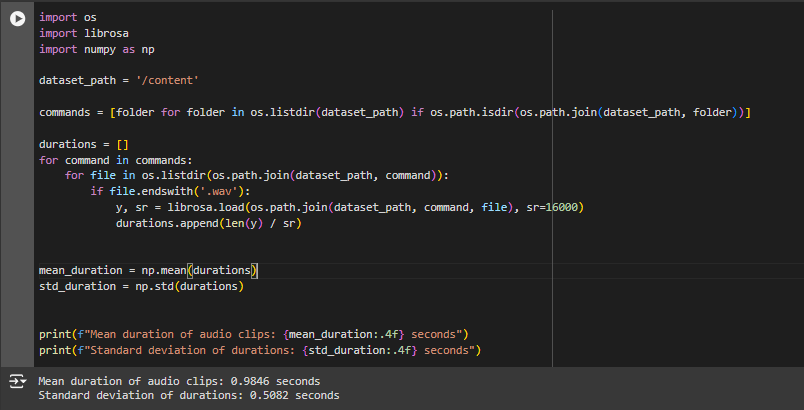
Dr. B.V. Raghav

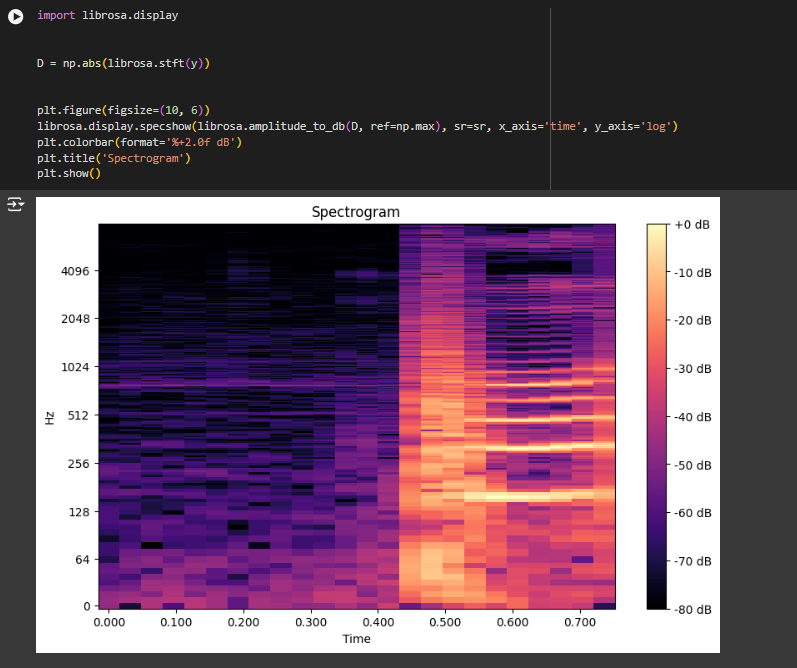
1. **Summary of the paper**

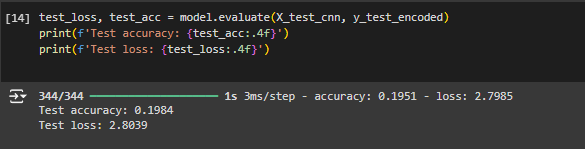
The Speech Commands dataset presents 105,000 utterances of 35 words from 2618 speakers for training and evaluating speech recognition models. This dataset is designed for efficient computation and real-time applications. The baseline model achieves an accuracy of 88.2%. This dataset is valuable for developing small-footprint models, especially for mobile devices and privacy-sensitive environments. Future research can focus on further optimizing the model for low-powered devices.

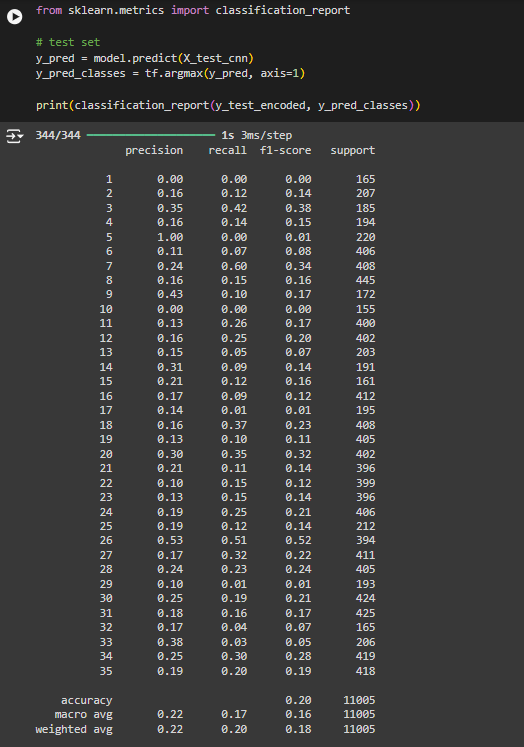
1. **Performance Results using standard benchmarks**:



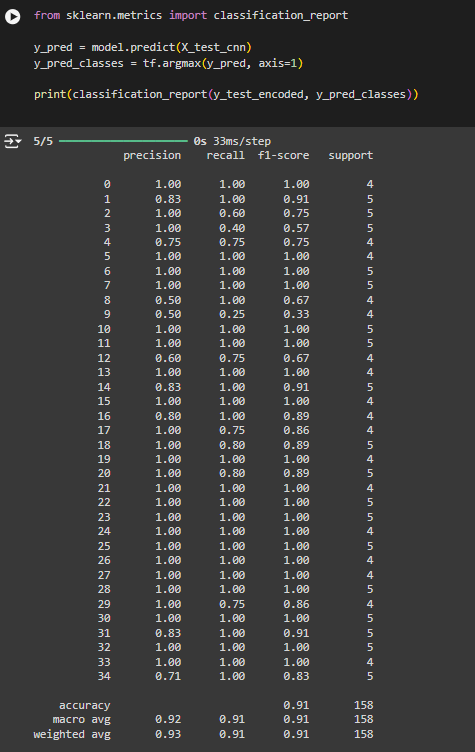




1. **Results after fine tuning the classifier.  
     
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1. **Results after fine tuning on custom dataset**

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