# Final Project Checkpoint 1

1. Github Repo Link

   https://github.com/visheshnarayan/cmsc320-final/tree/main

2. Datasets

   We are using the ReCANVO dataset consisting of vocalizations of non-verbal Autistic children/young adults from a study's participants, where each is classified with labels determining what the participant is expressing (happy, frustration, hunger, self talk, etc.). The dataset was compiled by post-doctorate Dr. Kristine Johnson at MIT to research ML techniques for identifying vocalization cues.

   Citation:

   Narain, J., & Johnson, K. T. (2021). ReCANVo: A Dataset of Real-World Communicative and Affective Nonverbal Vocalizations [Data set]. Zenodo. https://doi.org/10.5281/zenodo.5786860

3. Why this dataset

   We are choosing this dataset to explore whether it is possible to create a classification model that identifies the expressions a non-verbal person makes using ML/DL techniques. Furthermore, we aim to explore how harmonic analysis can provide unique features for classifying such sounds and potentially develop a solution that assists engineers in creating tools to help individuals with these challenges in everyday life. This could enable them to express their vocalizations through tools similar to Sequence to Sequence (Seq2Seq) translation.