Project Description

Problem Statement:

Gender Recognition system from audio files using FFT with Artificial Neural Networks.

Objective:

The main objective of this project is to build a classifier which can help us to detect the gender of the person using a recorded audio file (The audio file must contain voice of one person at a time).

To build this model, i will be working on the audio data set which will require a different kind of approaches for preprocessing it.

For preprocessing, i will be using an algorithm to transform the signal using **Fast Fourier Transformation (FFT)** and then we can extract the required features that will help in better classification.

The classification part through training will be done using **Artificial Neural Networks** which works best for this kind of problems .

Programming Language:

• python2 or python3

Platform:

- Ipython3
- Git and github
- Linux Based os

Open Source Python Packages:

- Tensorflow
- Keras
- scikit-learn