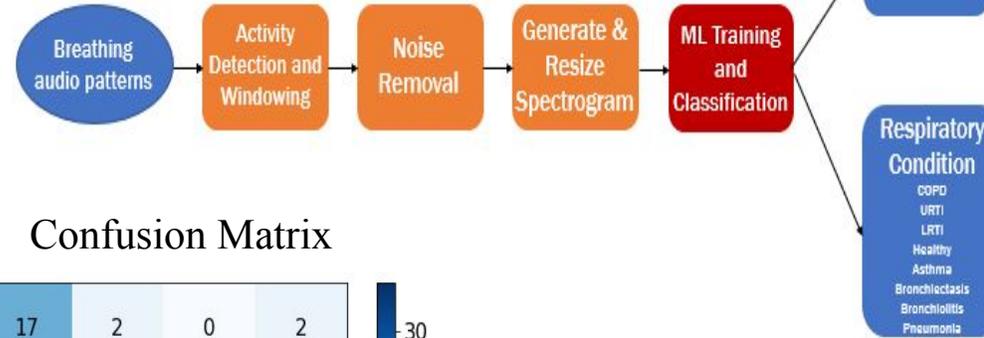


REU Project: Machine Learning for Breathing Pathology Detection with Emphasis on Bronchiectasis



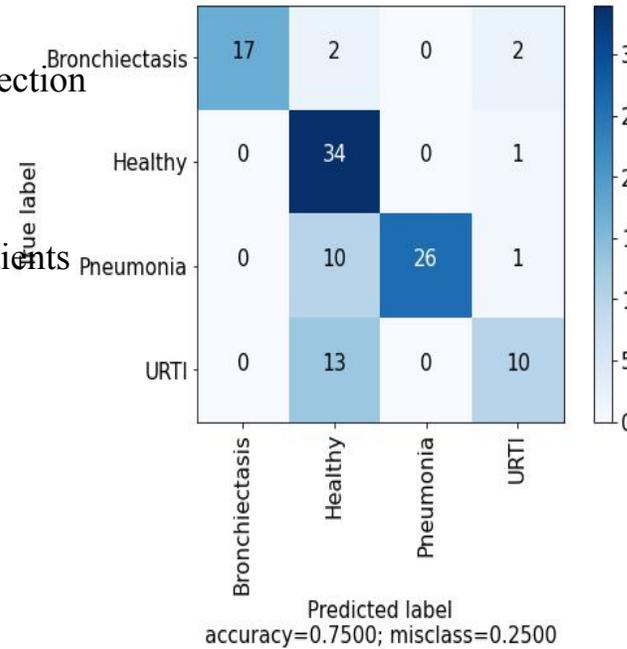
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- Kaggle Respiratory Audio Databases with 920 samples
- Using spectral estimation and convolutional neural networks
- Implementing VGG-13 deep learning model for detection
- Challenge: data is heavily biased with COPD data
- Focus on detecting Bronchiectasis from Healthy patients
- Current accuracy = 75.0%.

Confusion Matrix



Spectrograms

