# RET Project: Detecting Pneumonia using Audio Spectral Features

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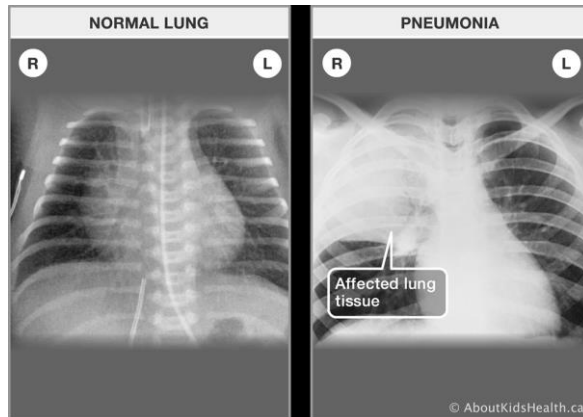SenSIP — Sensor, Signal and Information Processing Center

- ✓ Obtain data from audio databases of breathing cycle sounds

- ✓ Used spectral estimation and customized statistical features

- ✓ Challenge: bias in data set

- ✓ Use neural network methods to classify audio samples

- ✓ Output diagnosis / confusion matrix

- ✓ Current accuracy = 75%. Due to COPD bias in data set

- ✓ Goal: Design a lesson to inspire students to pursue a career in STEM
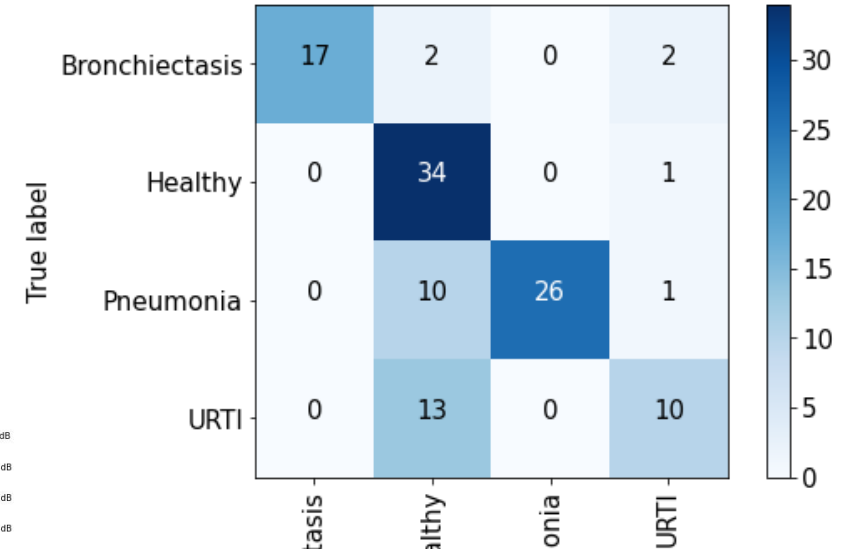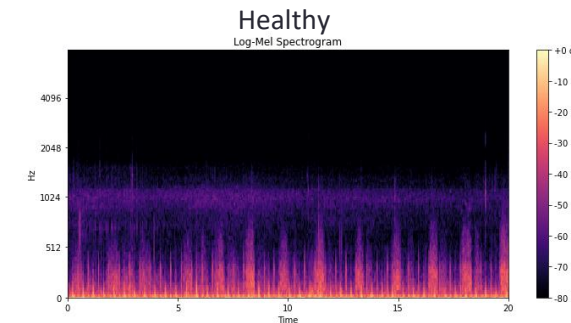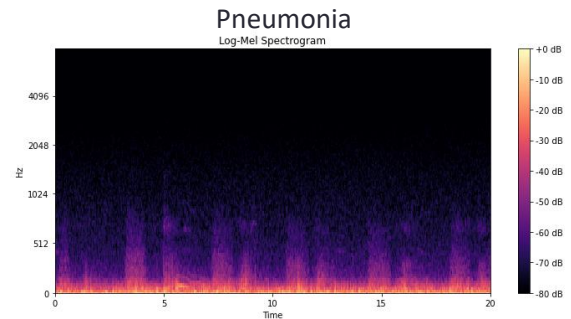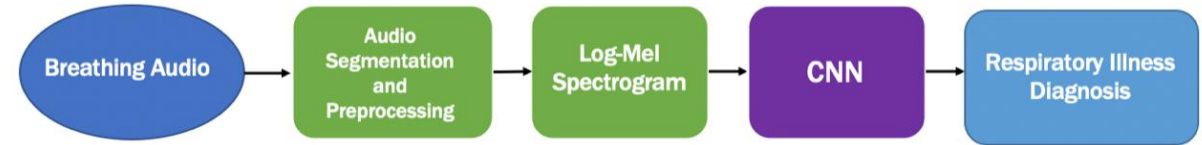
accuracy=0.7500; misclass=0.2500

Sensor Signal and Information Processing Center
http://sensip.asu.edu

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