REU Project: Quantum Machine Learning for Audio Classification

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- Obtain data from dysarthric speech databases
- Use spectral estimation and data-specific features
- MATLAB Classification Learner to test different models
- Output diagnosis / confusion matrix
- Qiskit to test Qmodel
- Current accuracy = ?

Confusion Matrix

<table>
<thead>
<tr>
<th></th>
<th>sick</th>
<th>healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>sick</td>
<td>587</td>
<td>280</td>
</tr>
<tr>
<td>healthy</td>
<td>150</td>
<td>109</td>
</tr>
</tbody>
</table>

Spectrogram

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

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