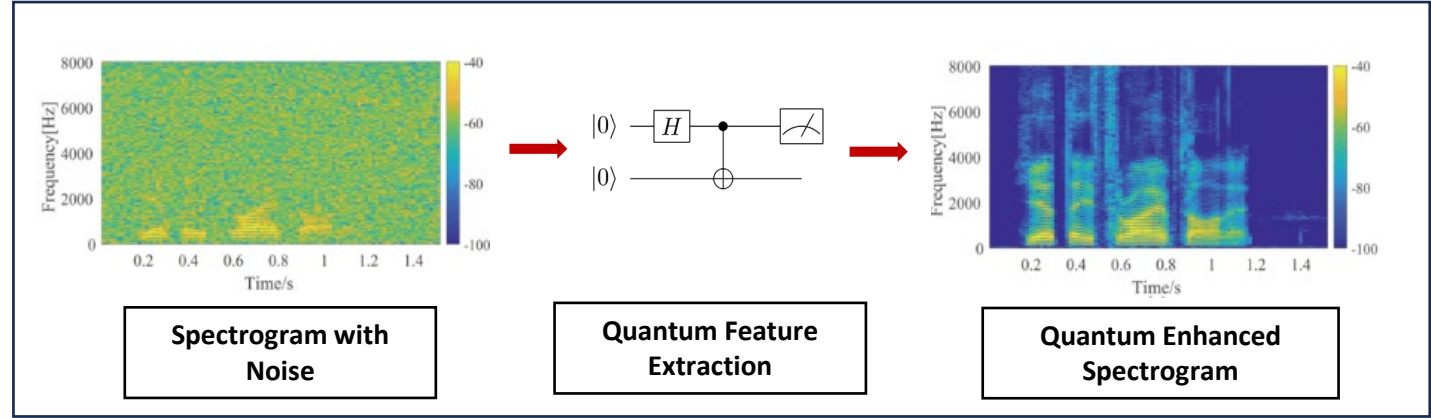
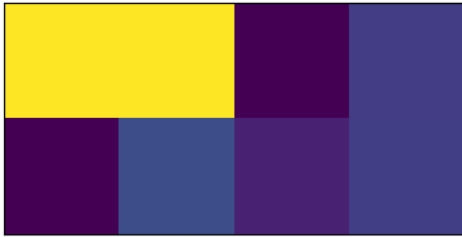


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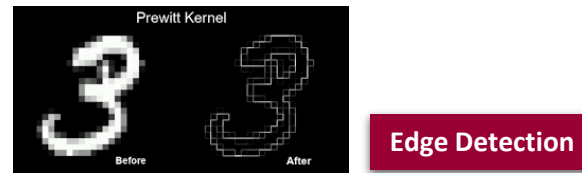
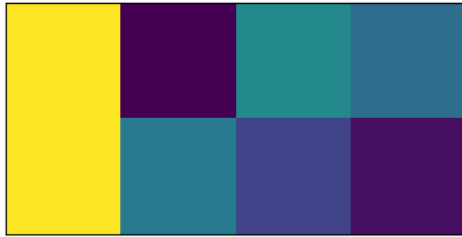
- ❑ Improve edge detection on handwritten digits and spectrograms
- ❑ Classify spectrograms with convolutional neural networks (CNNs)
- ❑ Build a quantum filter with quantum enhanced feature extraction
- ❑ Apply quantum filter to noisy spectrograms
- ❑ Test both classical and quantum CNNs on enhanced spectrograms



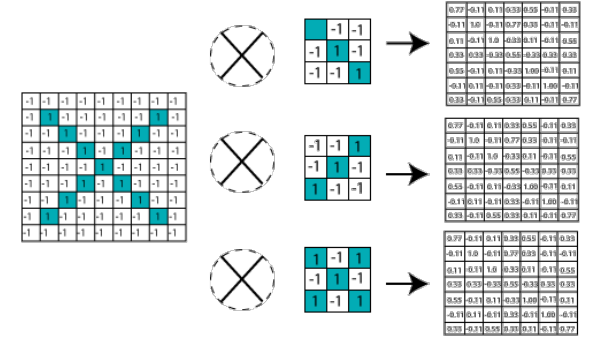
The QCNN predicts this is a Horizontal Line



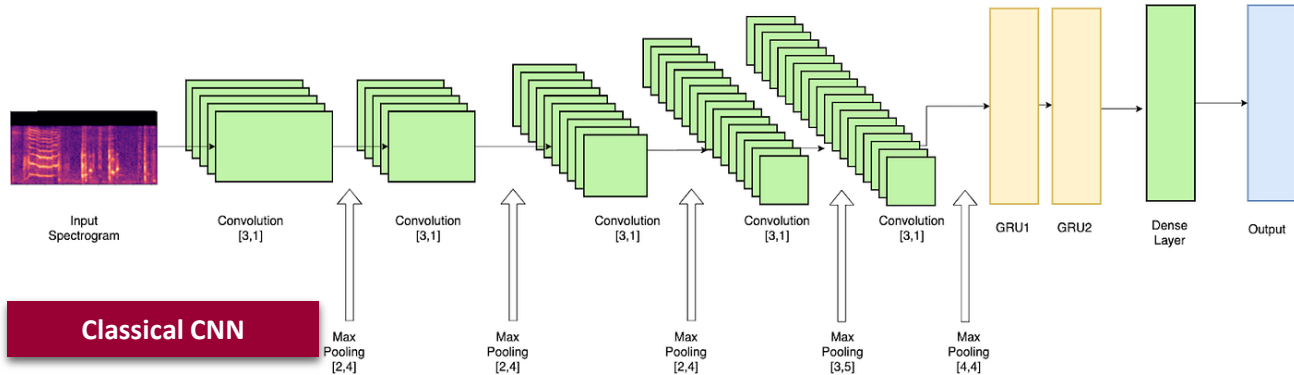
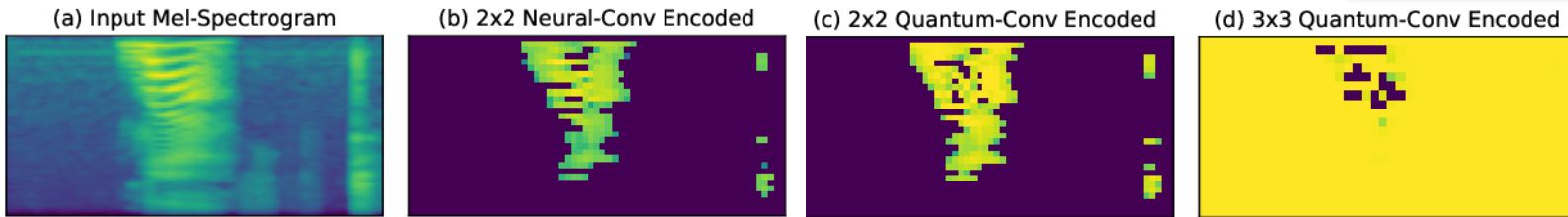
The QCNN predicts this is a Vertical Line



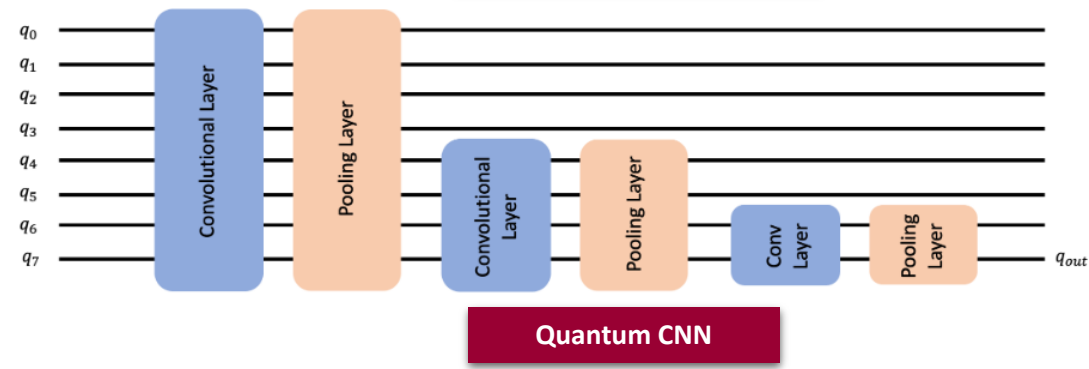
Edge Detection



Feature Extraction + Filters



Classical CNN



Quantum CNN