MIDI Generation with Quantum Neural Networks

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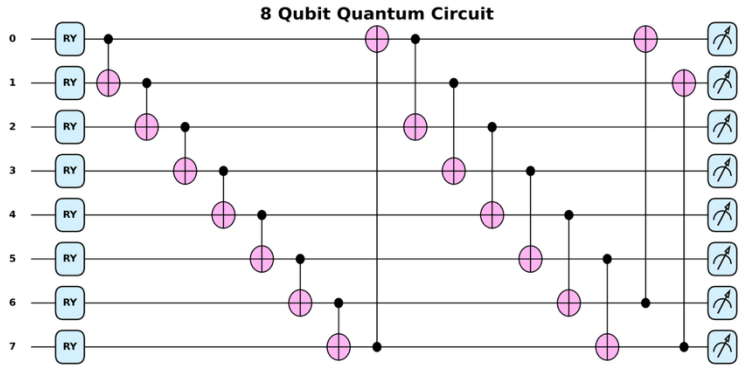
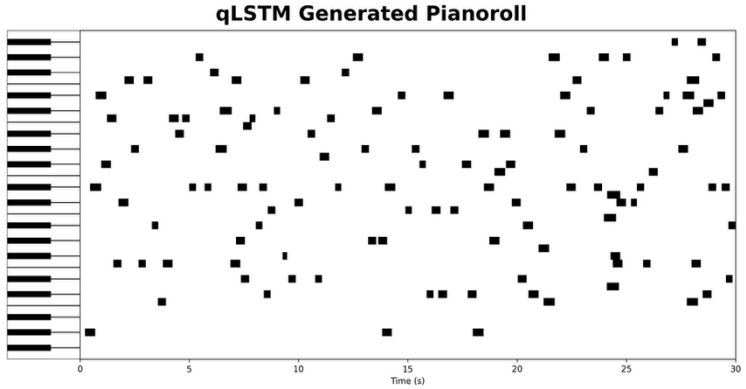
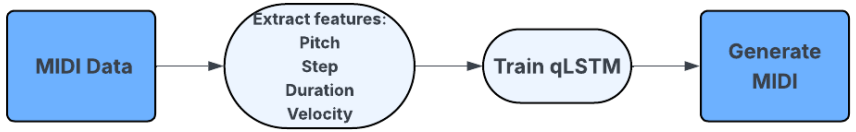
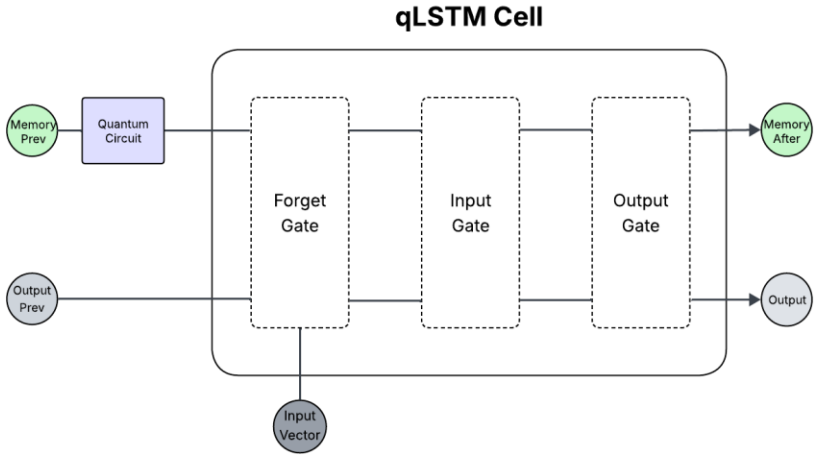
PROBLEM

- Our work is primarily concerned with generative neural networks.
- We believe that we can use quantum to enhance LSTMs.
- We use these quantum LSTM models to generate MIDI data.







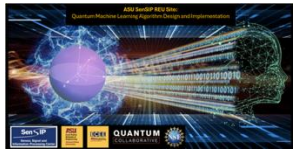


FUTURE GOALS

- We plan on further researching the quantum advantage with MIDI generation.
- Improve overall coherence of quantum music.

CONCLUSIONS

- Quantum has shown that it can capture features that classical cannot.
- We have been able to capture motifs and song structures with our qLSTM.
- Extremely difficult to train due to long runtimes.



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