

## Solar Fault Detection Using Quantum Machine Learning

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10

0.8

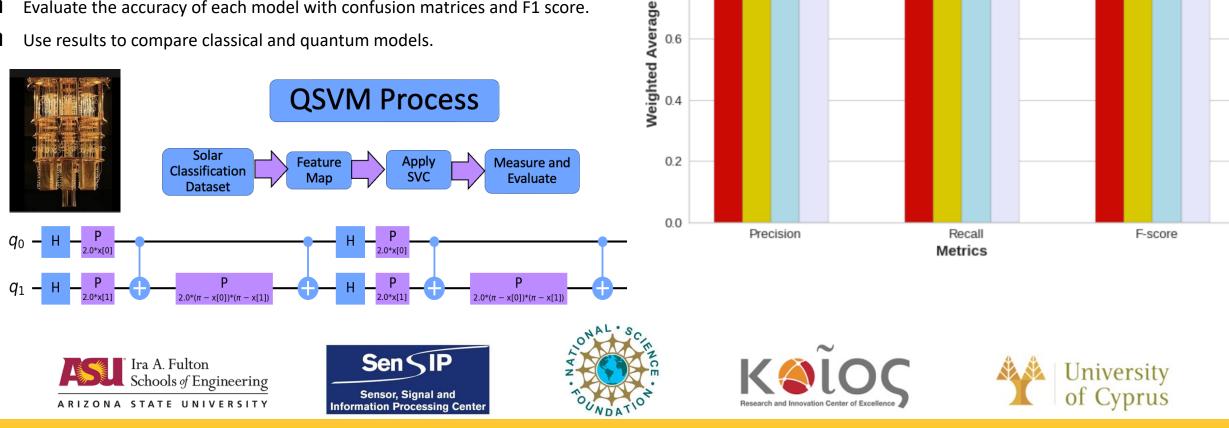


Linear

Polv

Rbf Sigmoid

- Obtain fault classification data from ASU solar dataset.
- Pre-process data (standardization, one-hot encoding, train/test split).
- Train various models to perform binary classification of faulty or not faulty.
- Create quantum machine learning model using Qiskit.
- Evaluate the accuracy of each model with confusion matrices and F1 score.
- Use results to compare classical and quantum models.



Sensor Signal and Information Processing Center: http://sensip.asu.edu/nsf-ires-project

IRES project sponsored by NSF Award 1854273.

SVM Metrics for Different Kernel Types