Preliminary Results: Featurization with Quantum Dot Array
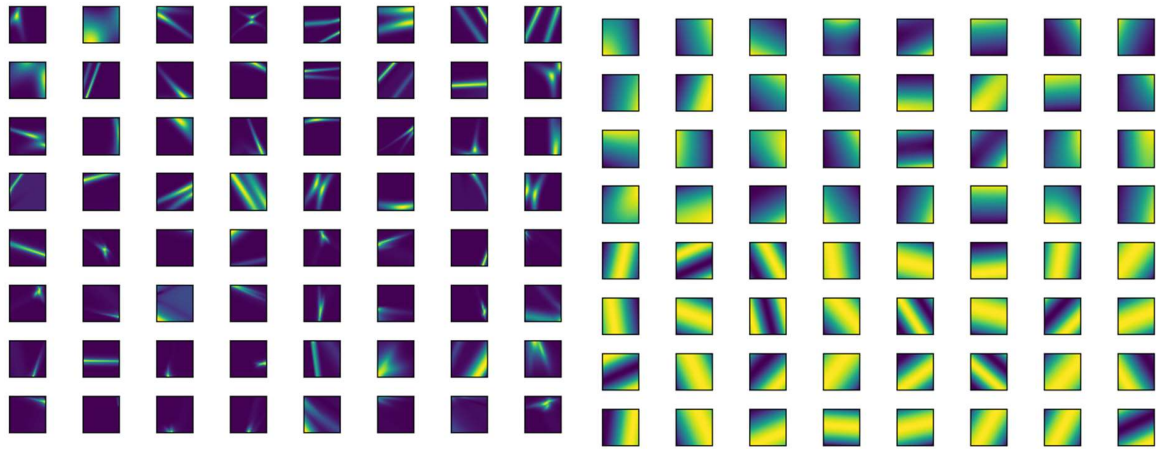

Figure 1 Two sets of 64 random quantum features and cosine features. The former map is related to current across a quantum dot device whereas the latter are Fourier features.
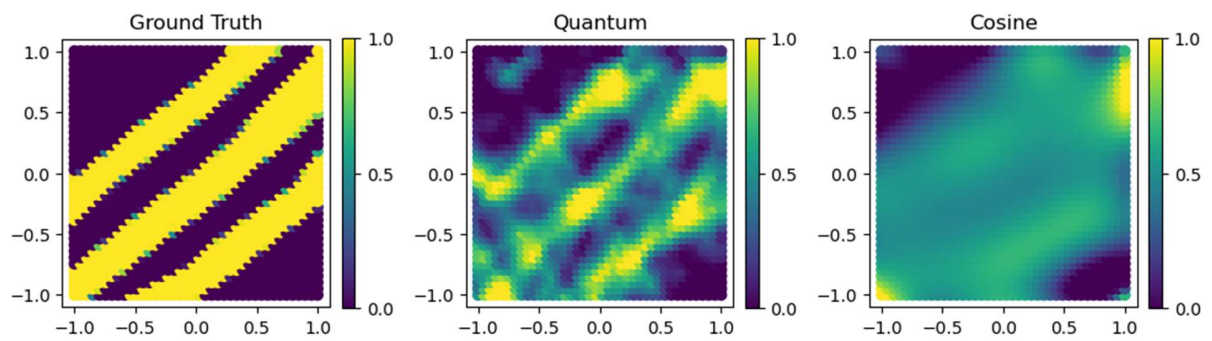

Figure 2: A classical neural network learns a labeling rule (left) which a linear model equipped with classical cosine features (right) cannot learn as well as one equipped with a quantum feature map (middle).