

ABSTRACT

5 **METHOD OF OPTIMIZING AI/ML PREDICTIONS FROM A CLASSICAL DATA FEED WITH A HYBRID SIMULATOR GENERATED FROM CLASSICAL AND QUANTUM MODEL STRUCTURES**

10 An embodiment of the invention is a computer-implemented AI/ML method of using a hybrid simulator with a plurality of selected simulators which include one or more classical simulators and one or more quantum simulators. The hybrid simulator is fed input pairs of classical inputs and quantum inputs, the classical inputs directed to the classical simulators and the quantum inputs directed to the quantum simulators. The classical inputs are pre-processed information extracted from classical data records.

15 The quantum input of each input pair is a reduced quantum representation of the classical input of the input pair. During an iterative series of training cycles and an iterative series of validation cycles, associated models are generated from model structures and the data partitioned for each cycle. Training characterizations and validation characterizations for each associated model are compared with those of other

20 associated models to select the winning models used to generate one or more winning predictions.

FIG. 1