

ABSTRACT

SYSTEM AND METHOD FOR FAULT DETECTION IN ROBOTIC ACTUATION

A data driven approach for fault detection in robotic actuation is disclosed. Here, a set of robotic tasks are received and analyzed by a Deep Learning (DL) analytics. The DL analytics includes a stateful (Long Short Term Memory) LSTM. Initially, the stateful LSTM is trained to match a set of activities associated with the robots based on a set of tasks gathered from the robots in a multi robot environment. Here, the stateful LSTM utilizes a master slave framework based load distribution technique and a probabilistic trellis approach to predict a next activity associated with the robot with minimum latency and increased accuracy. Further, the predicted next activity is compared with an actual activity of the robot to identify any faults associated robotic actuation.

<<To be published with FIG. 1>>