**Paper Review: “Differential RNNs for Action Recognition”**

* LSTM NNs capable of processing complex sequential info since it utilizes special gating schemes for learning representations from long input sequences
* Has potential to model any sequential time-series data where current hidden state has to be considered in the context of past hidden state
  + Property makes LSTM ideal choice to learn complex dynamics of various actions
* Conventional LSTMs do not consider impact of spatio-temporal dynamics corresponding to the given salient motion patterns, when they gate the info that ought to be memorized through time
* To address this problem, paper proposes a differential gating scheme for the LSTM NN which emphasizes on the change in info gain caused by the salient motions between the successive frames

**Significant Points and Takeaways from Paper**

* Conventional LSTMs do not consider impact of spatio-temporal dynamics corresponding to the given salient motion patterns, when they gate the info that ought to be memorized through time