The paper introduces an end-to-end approach by using recurrent neuron network to detect the action and its boundary in a long video. At each timestamp, a feature vector is fed into RNN. Training is done by back propagation and reinforce. A candidate detection is computed as a hypothesis for a action instance. A prediction indicator will decide whether the candidate detection should be emitted or not. A temporal location will indicates the next frame to observe. All theses variables will be trained. Candidate detection is matched with ground truth by the temporal distance. And loss function is computed basing on the match. Reinforce is applied to deal with non-differentiable setting for back propagation. The idea is to assign a reward function of reach possible action and maximize the total expected reward. A reward function penalizes the incorrect prediction and encourages both true positive and false negative predictions. The result shows the model can outperform state-of-art method on THUMOS dataset.