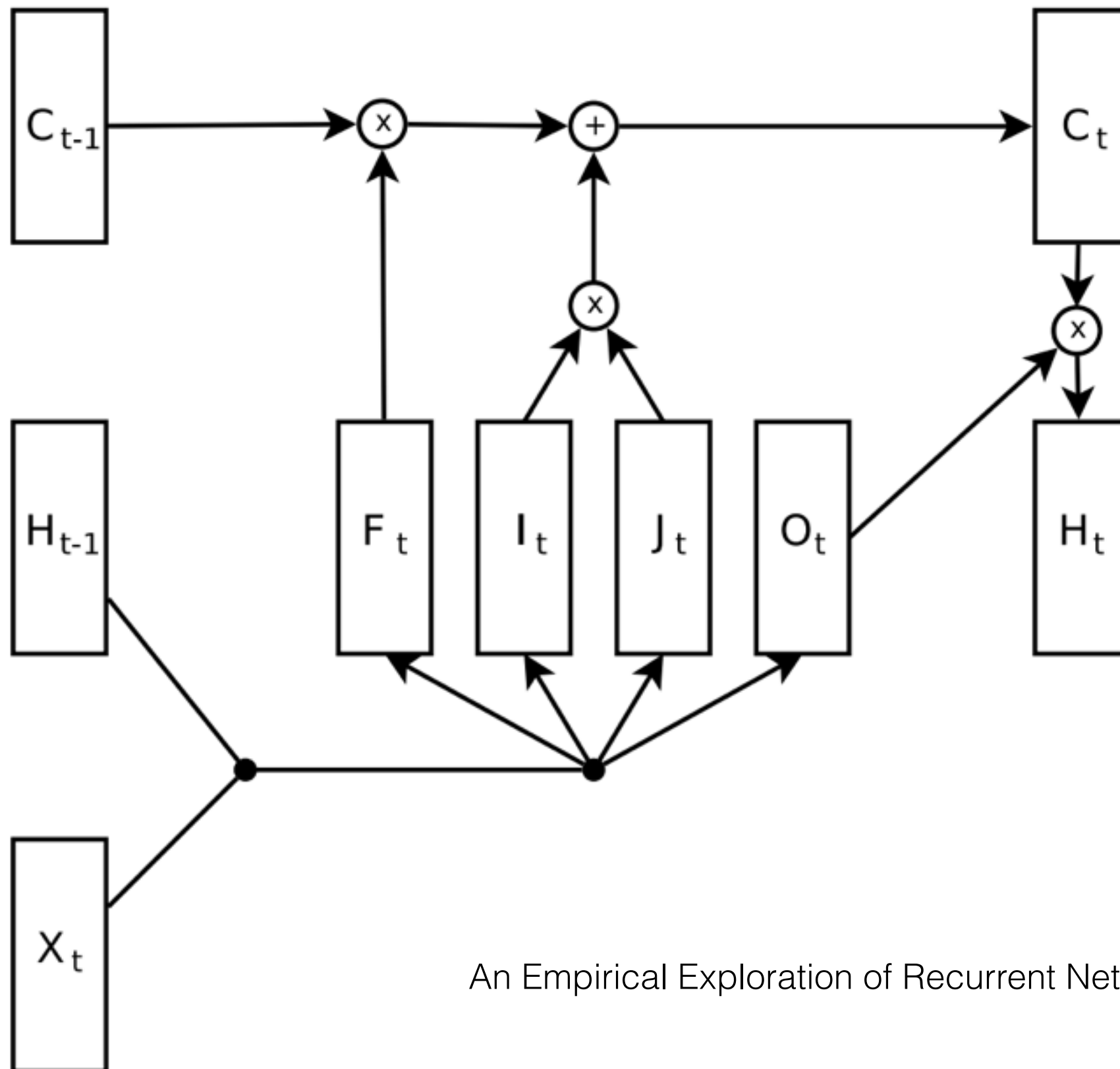


RNN Encoder-Decoder

Model and Implementation

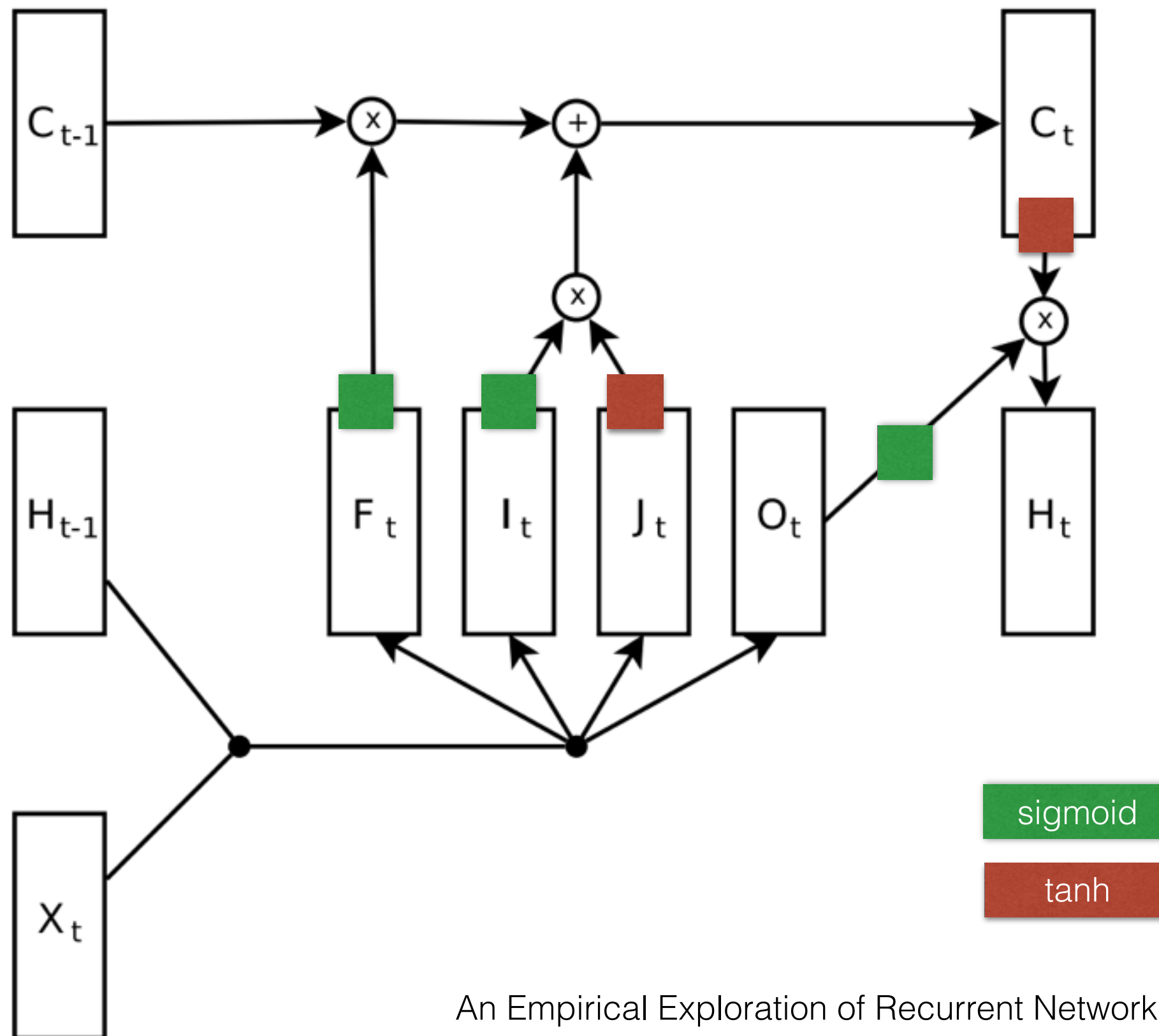
Shi Feng
Zhirui Zhang

LSTM and GRU

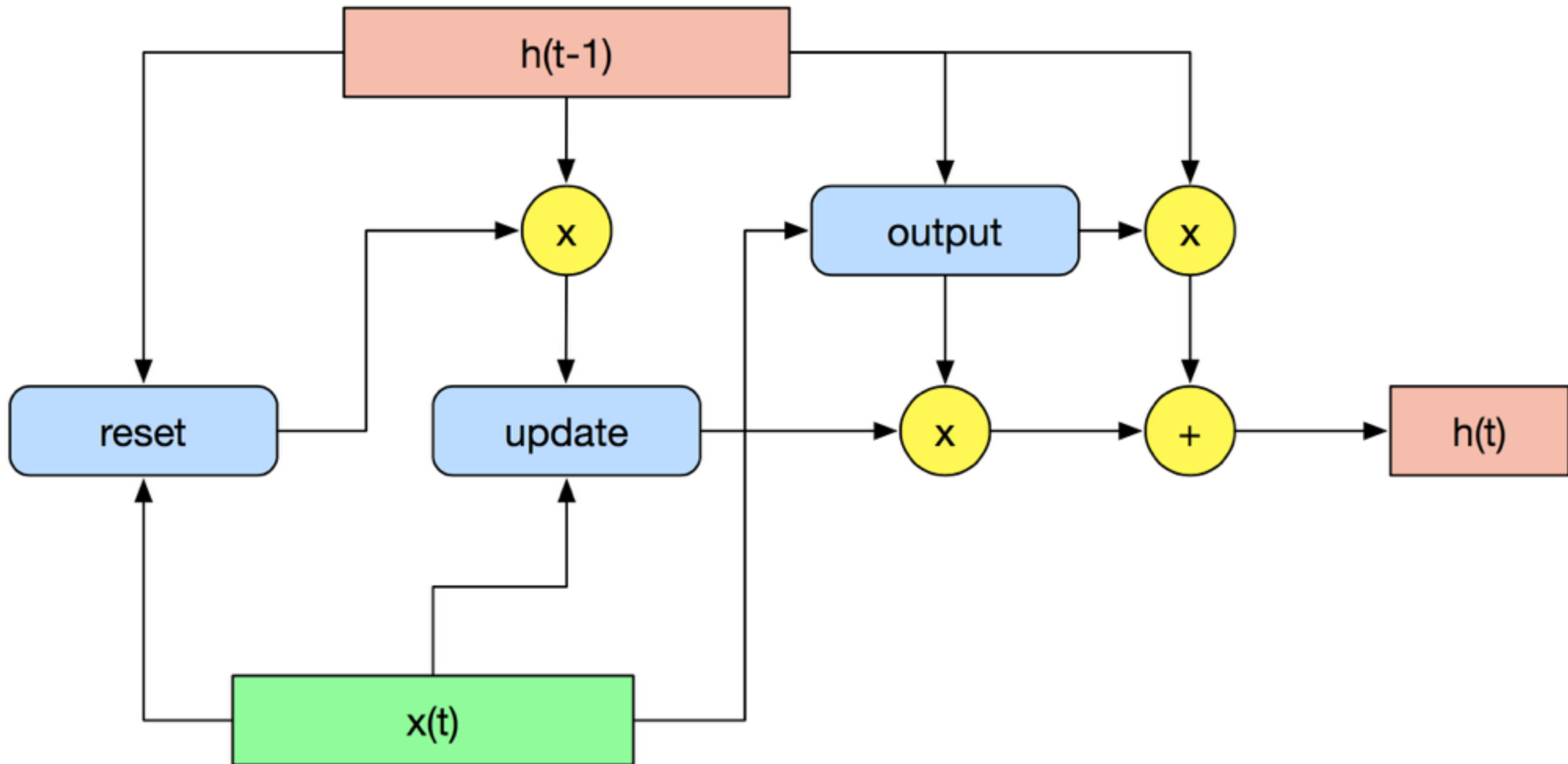


An Empirical Exploration of Recurrent Network Architectures

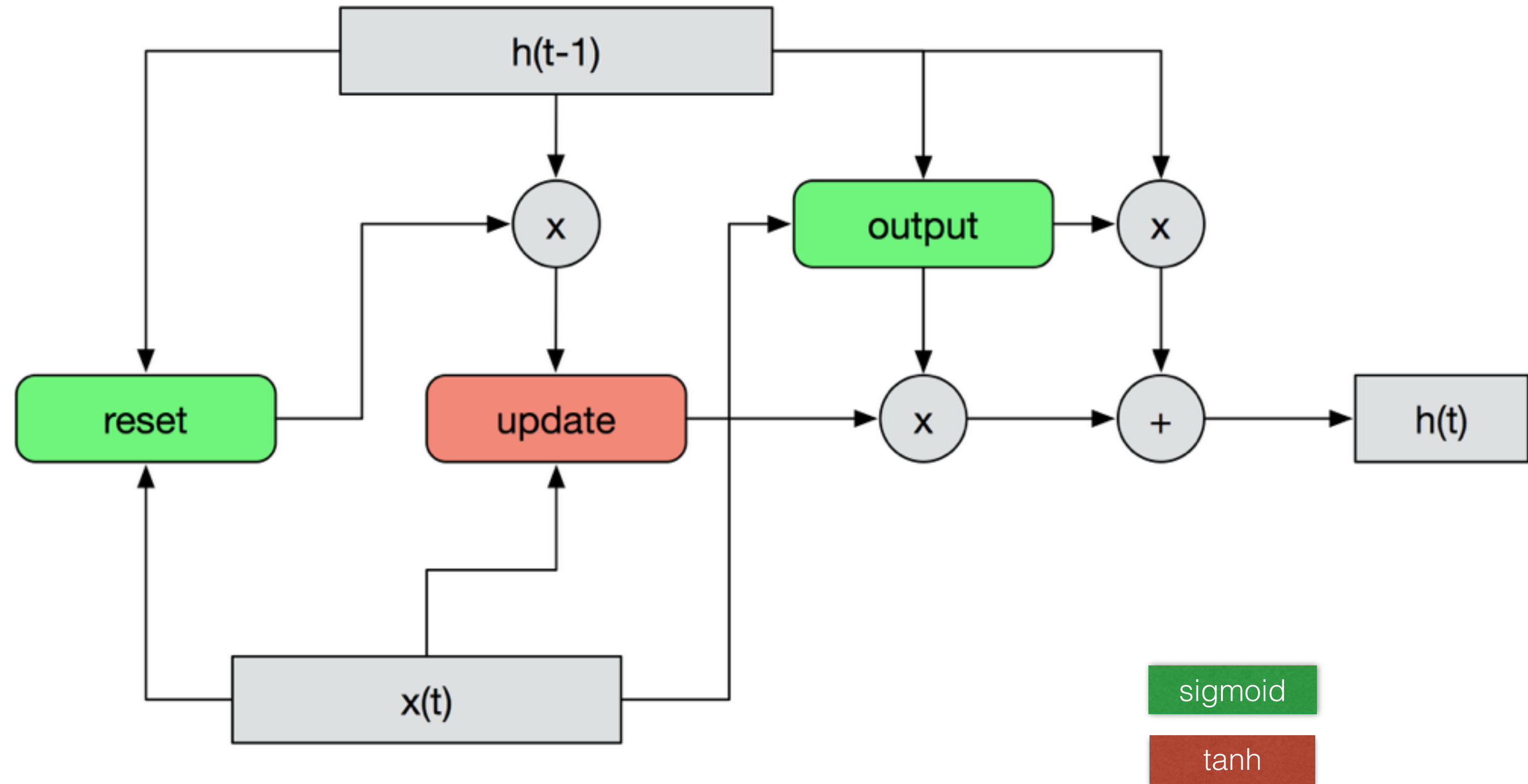
LSTM and GRU



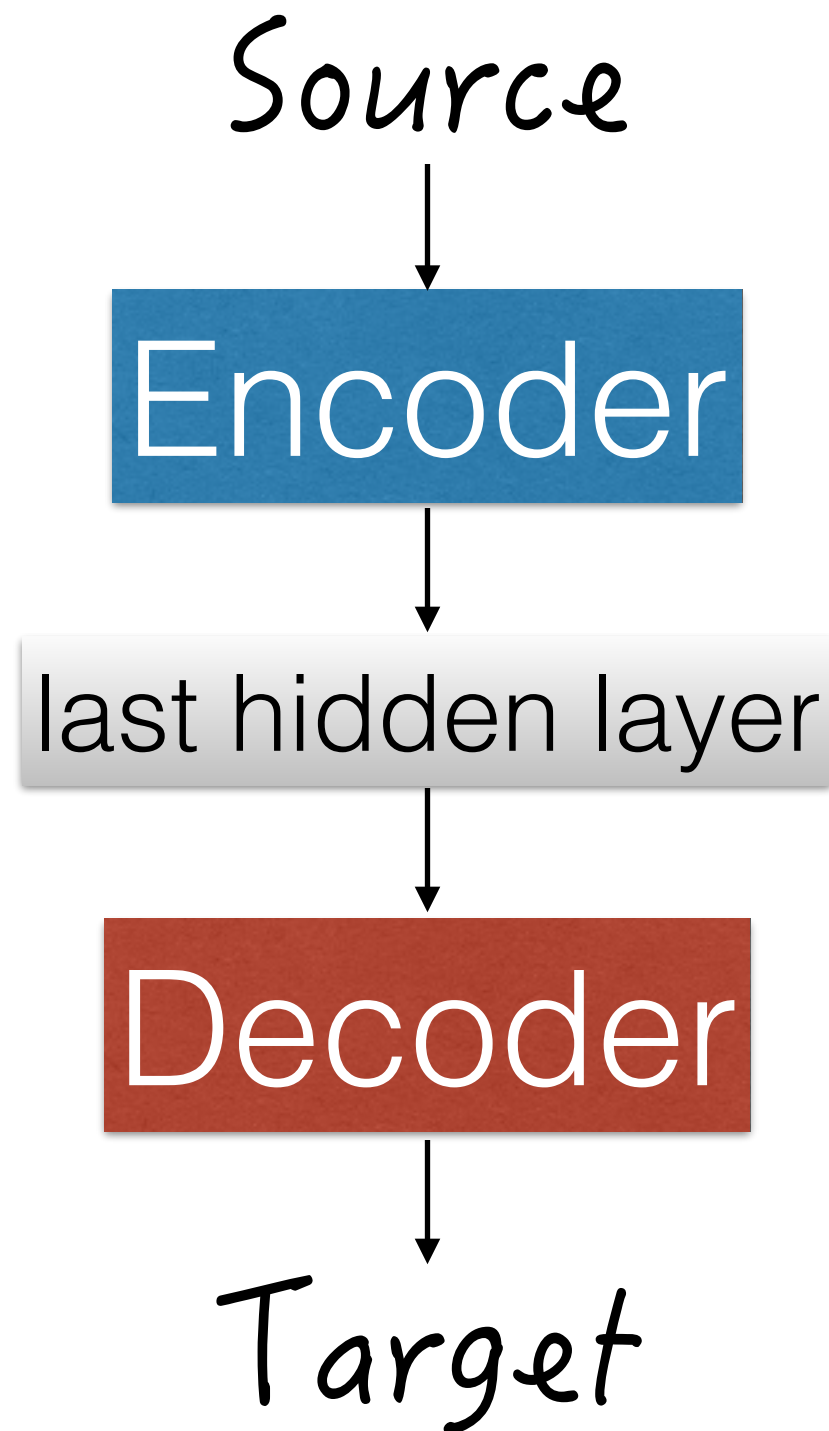
LSTM and GRU



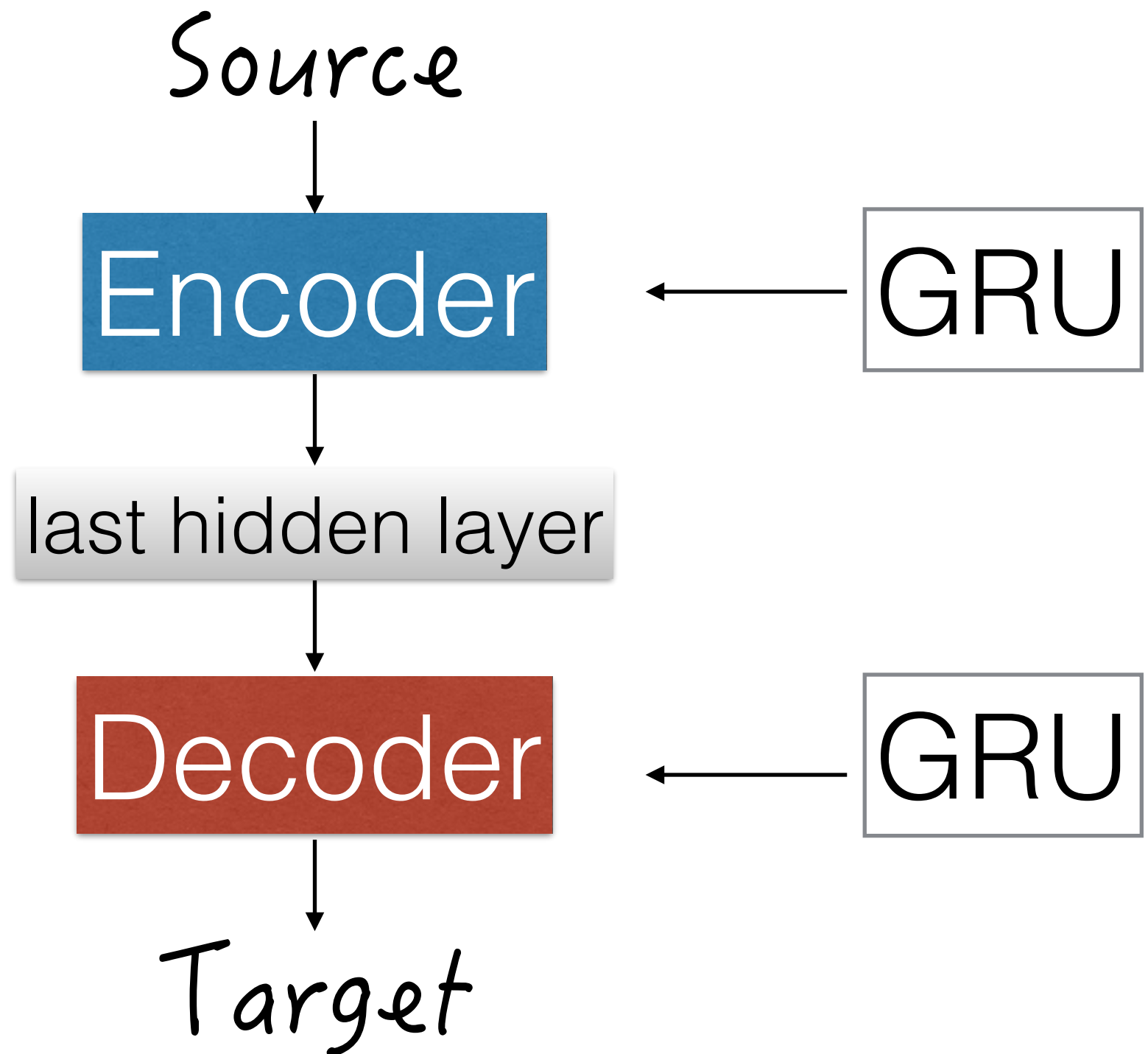
LSTM and GRU

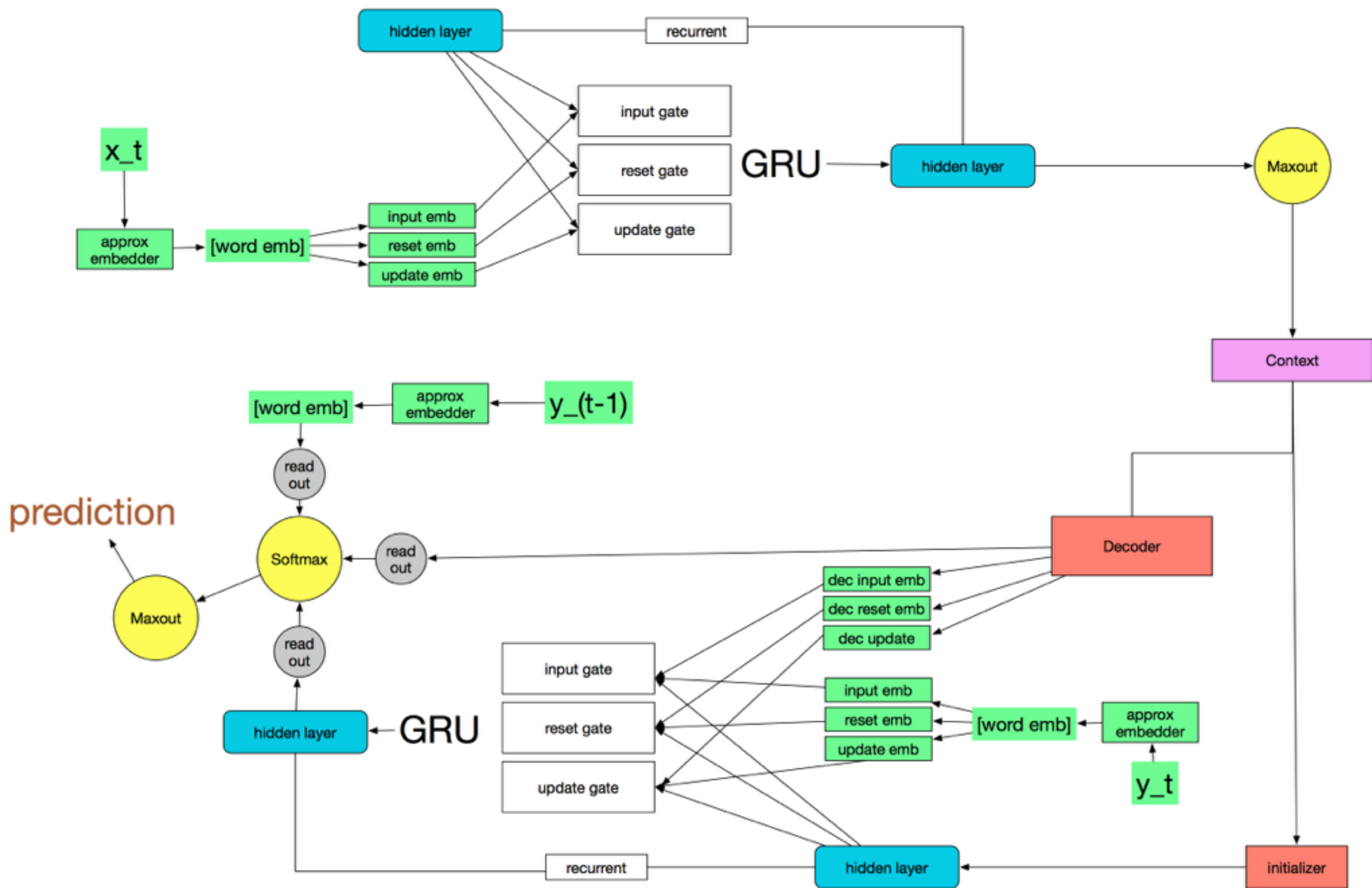


RNN Encoder-Decoder

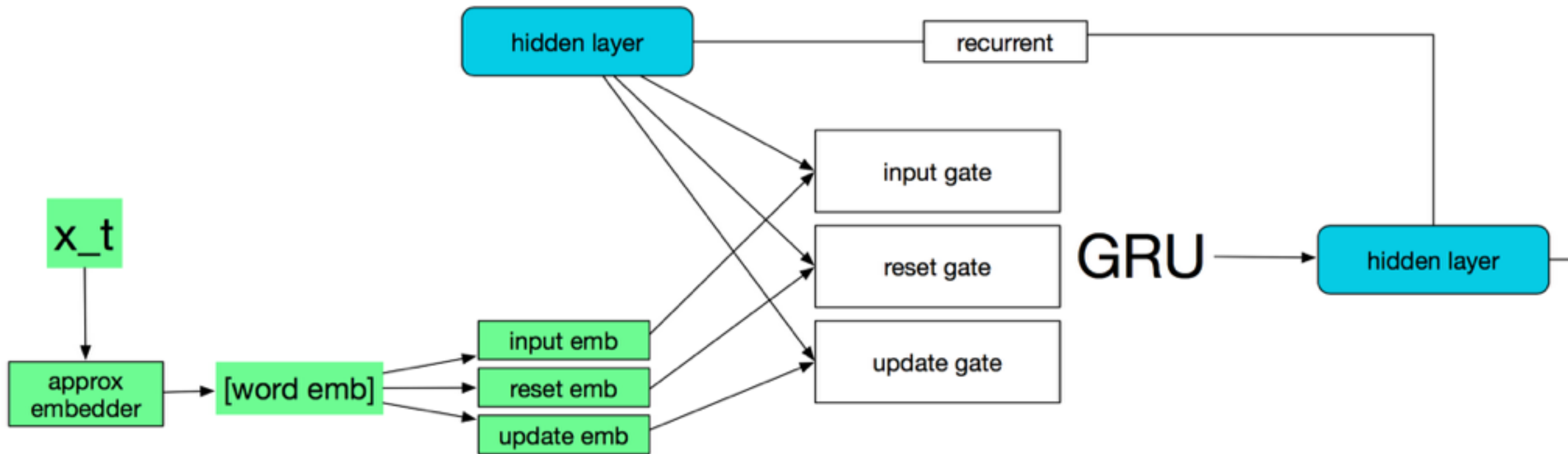


RNN Encoder-Decoder

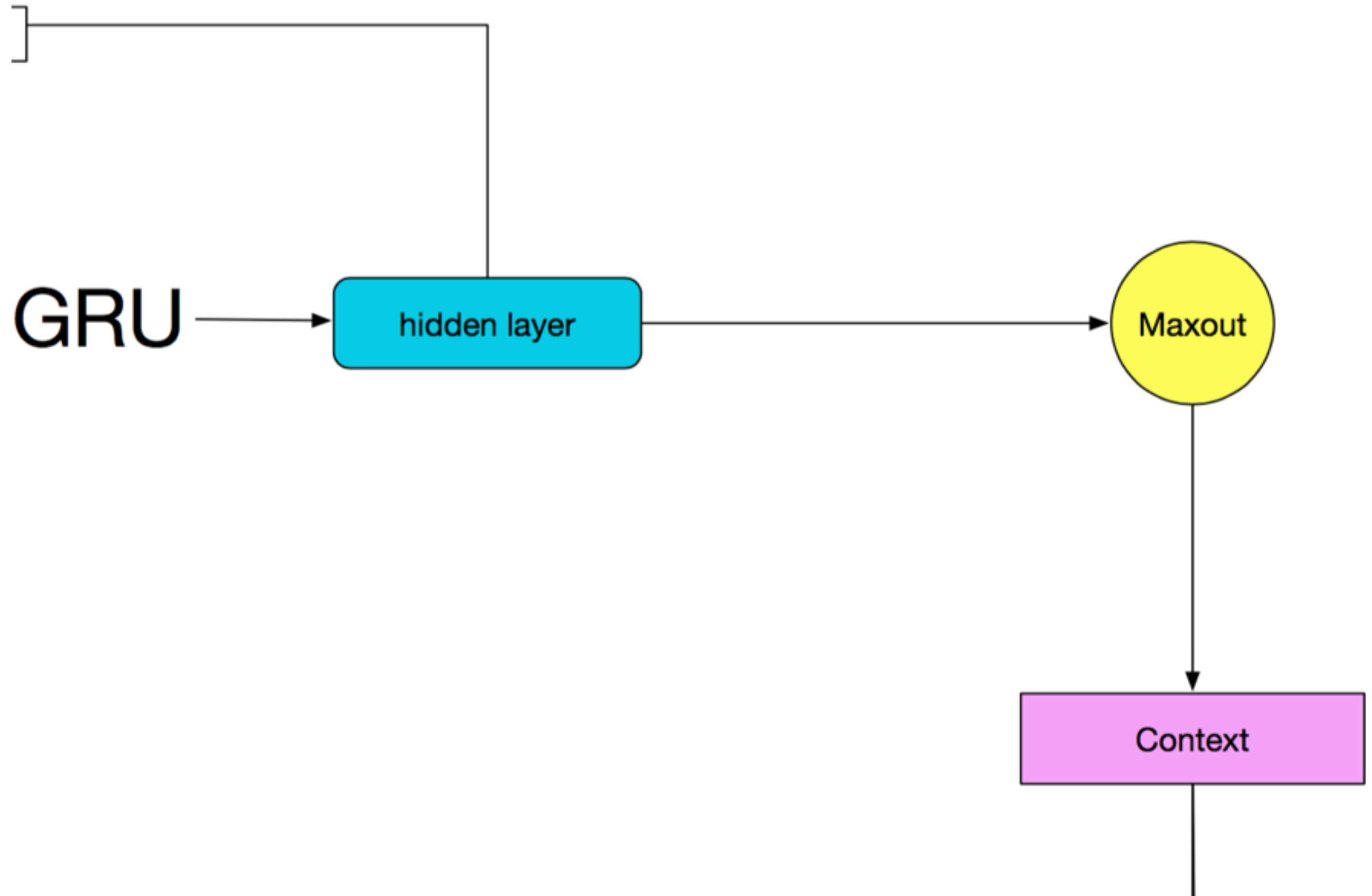




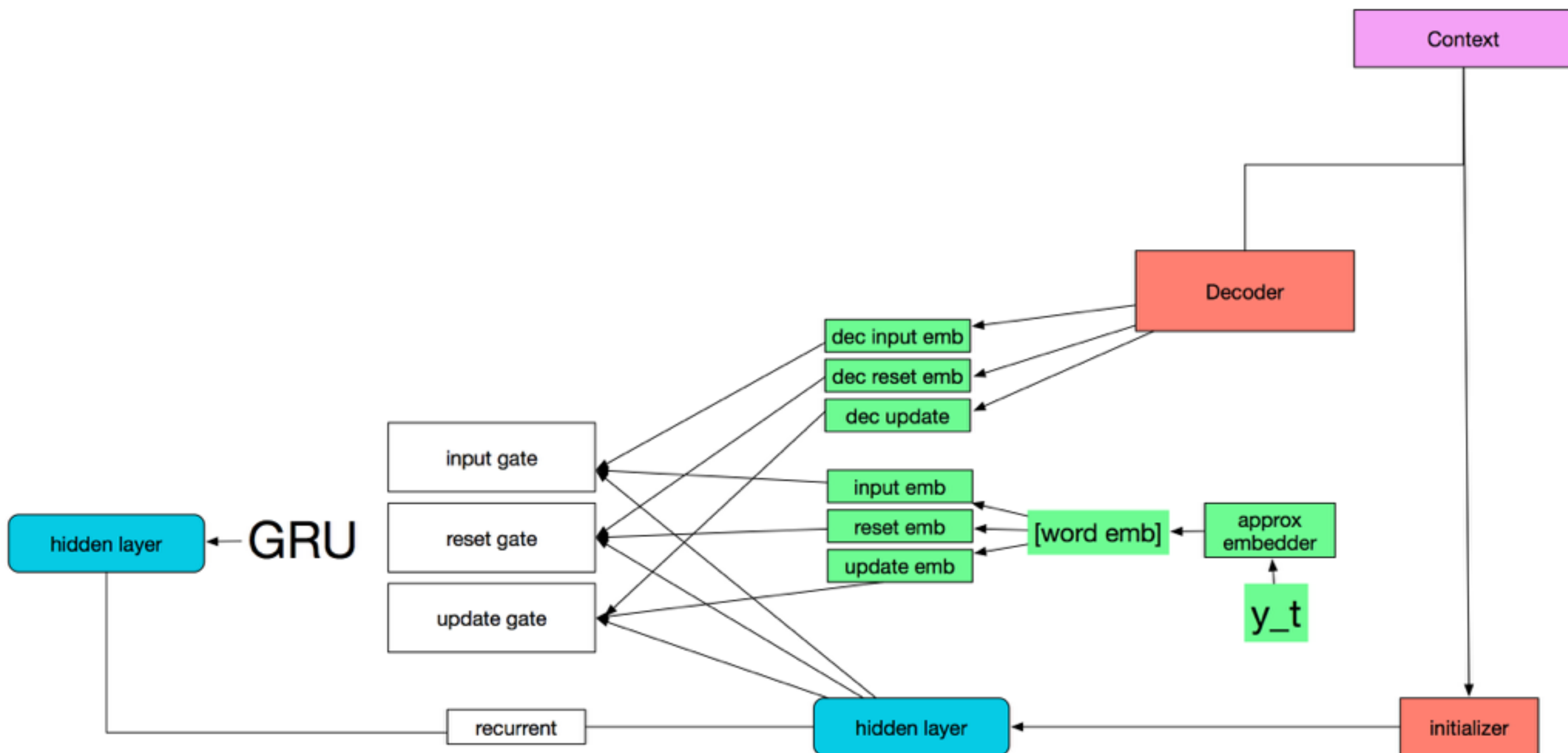
Encoder



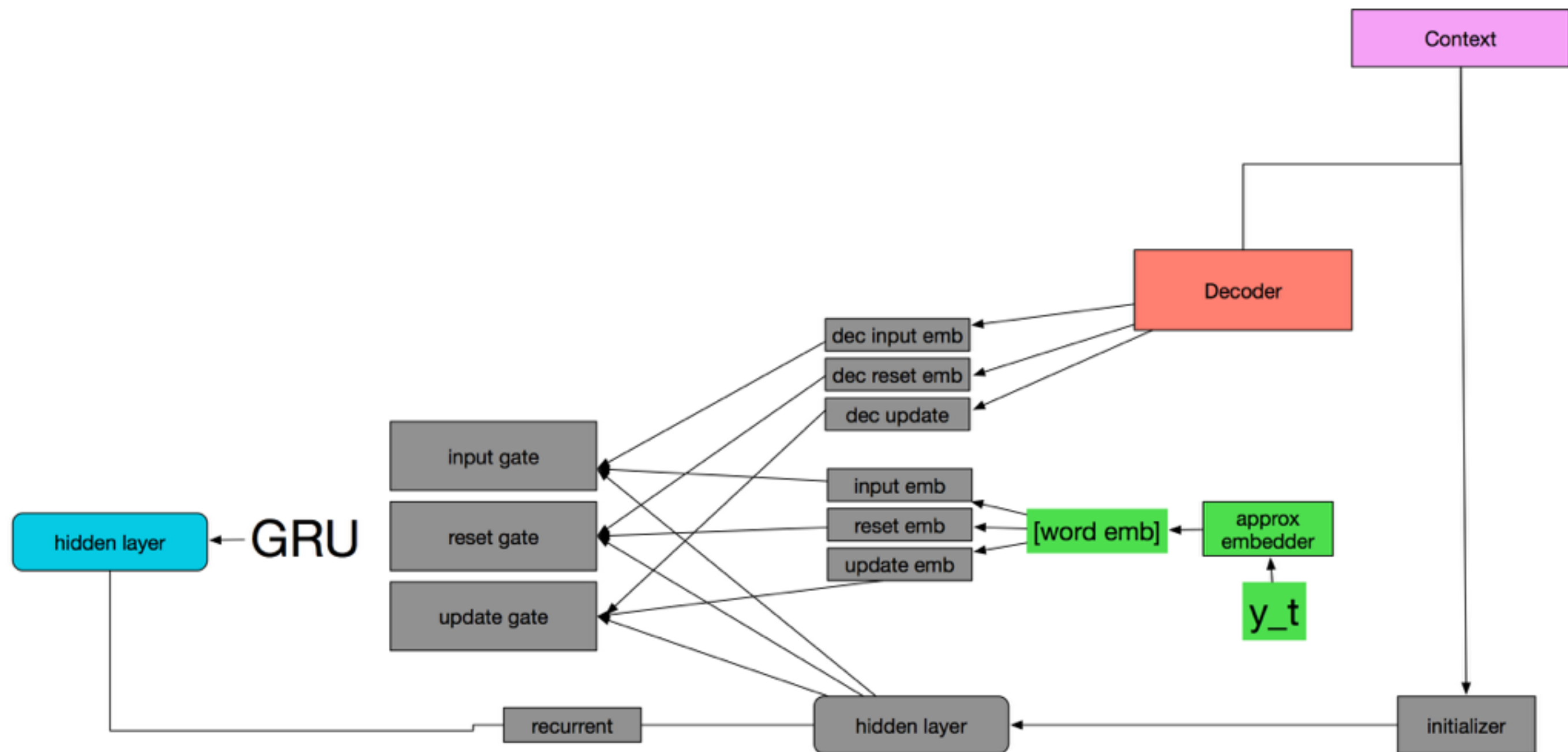
From Encoder to Context



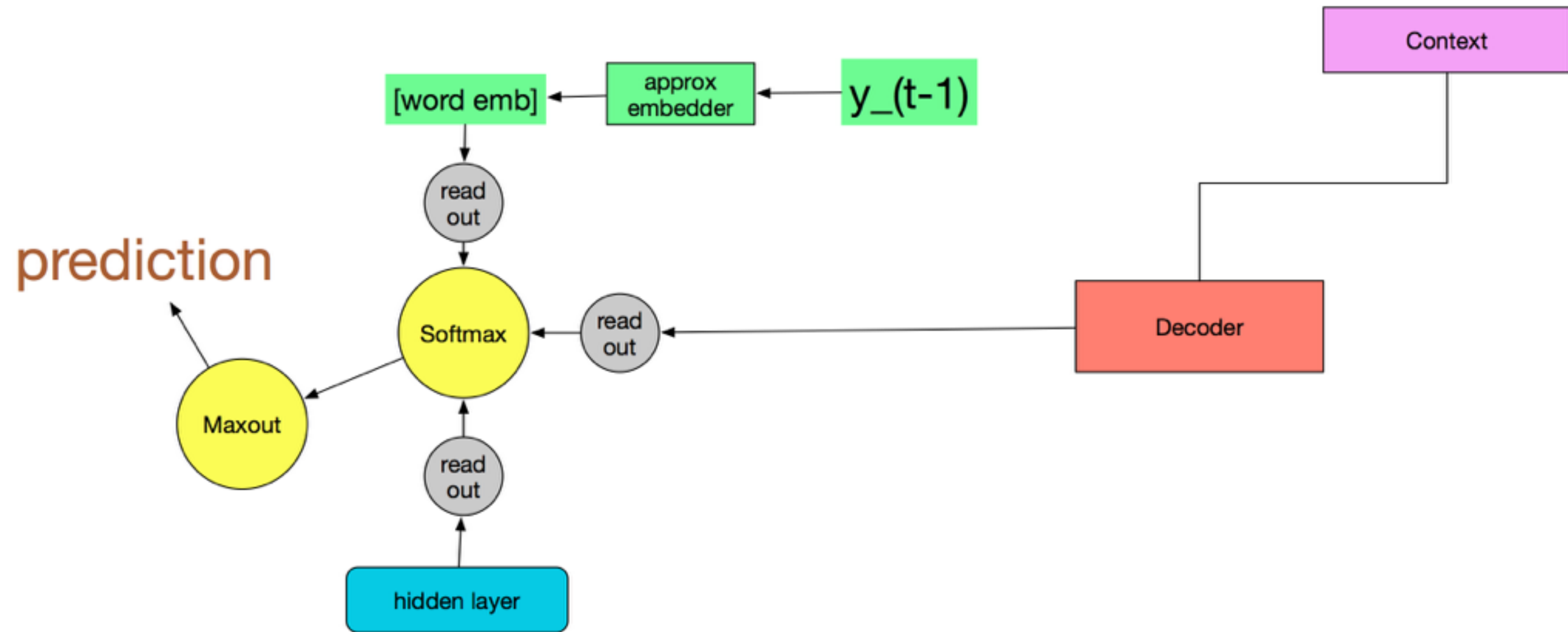
Decoder

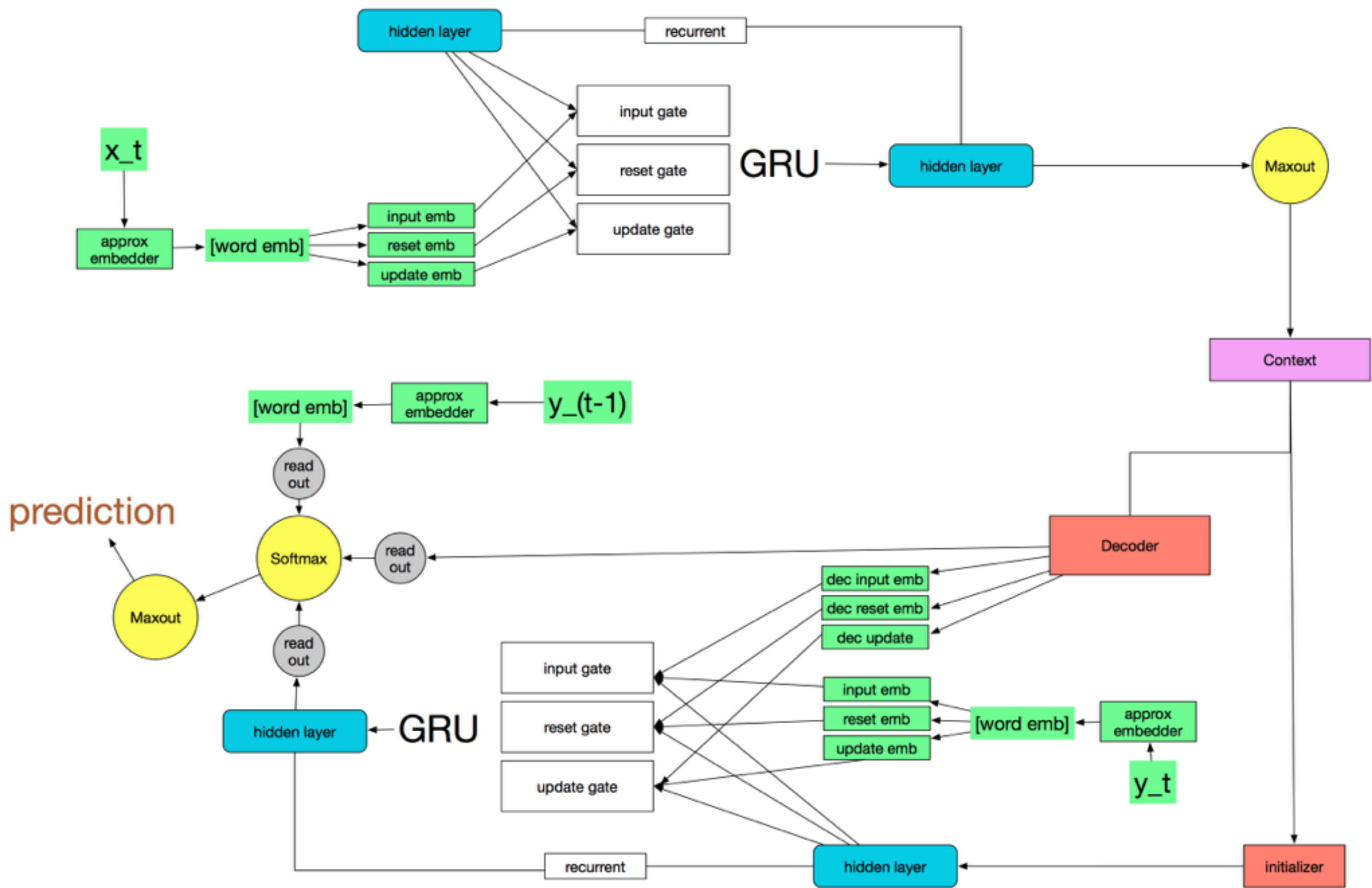


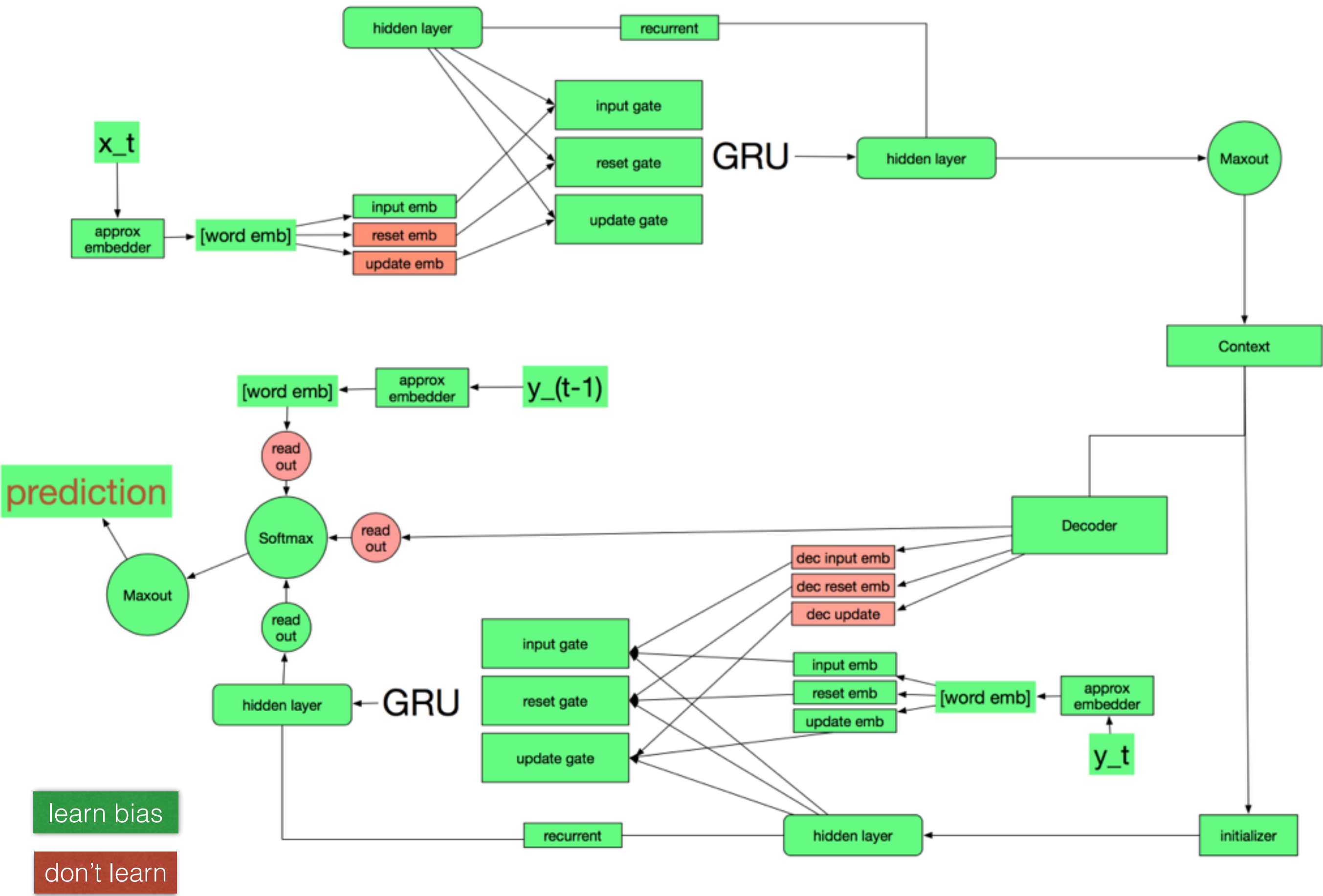
From Decoder to Output



From Decoder to Output







Variations & Extensions

- Forward & backward RNN, attention mechanism
 - *Neural Machine Translation by Jointly Learning to Align and Translate*
- Replace GRU with LSTM
 - *Sequence to Sequence Learning with Neural Networks*
- Translate image to language
 - *Show and Tell: A Neural Image Caption Generator*
 - *Show, Attend and Tell: Neural Image Caption Generation with Visual Attention*