# Reading Report of "Encoding Recurrent into Transformers"

# from ICLR 2023

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# Prerequisite knowledge

# **RNN**

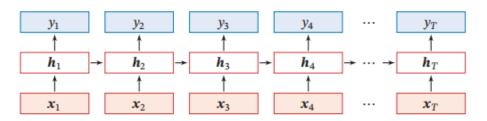


图 6.2 按时间展开的循环神经网络

$$egin{aligned} h_t &= f(Uh_{t-1} + Wx_t + b) \ y_t &= Vh_t \end{aligned}$$

# **LSTM**

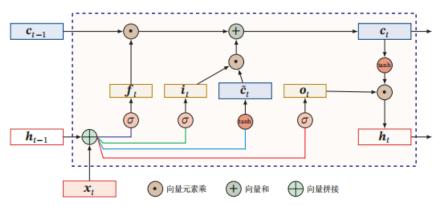


图 6.7 LSTM 网络的循环单元结构