Memory cell internal state $\mathbf{C}_{t-1}$

Forget gate $\mathbf{F}_t$

Input gate $\mathbf{I}_t$

Input node $\tilde{\mathbf{C}}_t$

Output gate $\mathbf{O}_t$

$\mathbf{C}_t$

Hidden state $\mathbf{H}_{t-1}$

$\mathbf{H}_t$

Input $\mathbf{X}_t$

σ FC layer with activation function

Elementwise operator

Copy

Concatenate