First document. This is a simple example, with no extra parameters or packages included.

$$x = ReLU(W_{xx}x_0^{(t)} + b_{xx})$$

$$g^{(t)} = tanh(D(W_{gx}x^{(t)}) + D(W_{gh}h^{(t-1)}) + b_g)$$

$$i^{(t)} = \sigma(D(W_{ix}x^{(t)}) + D(W_{ih}h^{(t-1)}) + b_i)$$

$$f^{(t)} = \sigma(D(W_{fx}x^{(t)}) + D(W_{fh}h^{(t-1)}) + b_f)$$

$$o^{(t)} = \sigma(D(W_{ox}x^{(t)}) + D(W_{oh}h^{(t-1)}) + b_o)$$

$$s^{(t)} = g^{(t)} \odot i^{(t)} + s^{(t-1)} \odot f^{(t)}$$

$$h^{(t)} = tanh(s^{(t)}) \odot o^{(t)}$$

$$y^{(t)} = W_{hy}h^{(t)} + b_y$$