

“Desired Output” for CriticNN:

$$\begin{aligned} \lambda_s^\circ(t) = & \frac{d}{dR_s(t)}U(t) + \sum_{j=1}^a \left(\frac{\partial}{\partial u_j(t)}U(t) \cdot \frac{\partial}{\partial R_s(t)}u_j(t) \right) \\ & + \sum_{k=1}^n \left(\frac{\partial}{\partial R_k(t+1)}J(t+1) \cdot \frac{d}{dR_s(t)}R_k(t+1) \right) \\ & + \sum_{k=1}^n \left\{ \sum_{j=1}^a \left(\frac{\partial}{\partial R_k(t+1)}J(t+1) \cdot \frac{\partial}{\partial u_j(t)}R_k(t+1) \cdot \frac{\partial}{\partial R_s(t)}u_j(t) \right) \right\} \end{aligned}$$