## Algorithm 3 Conditional Temporal Difference (CTD) for evaluating policy $\pi$ Let $\theta_1$ , the nonnegative parameters $\alpha$ and $\{\beta_t\}$ be given. for t = 1, ..., T do

Collect  $\alpha$  state transition steps without updating  $\{\theta_t\}$ , denoted as  $\{\zeta_t^1, \zeta_t^2, \dots, \zeta_t^{\alpha}\}$ . Set

$$\frac{1}{2} \int_{\mathbb{R}^{n}} \left\{ \zeta_{t}, \zeta_{t}, \ldots, \zeta_{t} \right\}.$$

(5.11)

Set 
$$\theta_{t+1} = \theta_t - \beta_t \tilde{F}^{\pi}(\theta_t, \zeta_t^{\alpha}).$$

end for