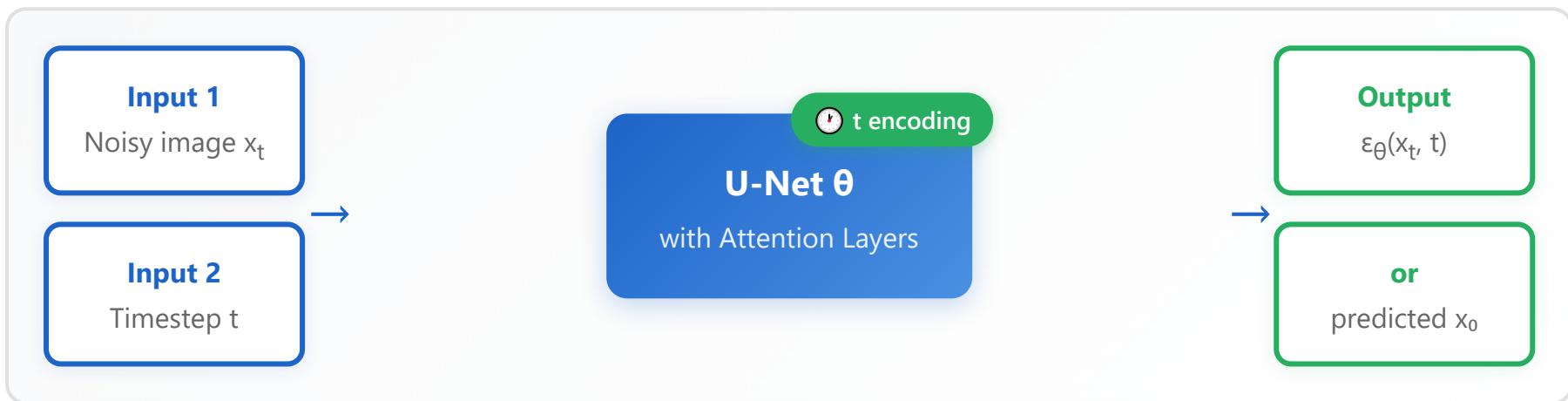


# Neural Network Parameterization

Part 3/7: Reverse Process



## Mean Prediction

$$\mu_\theta(x_t, t) = 1/\sqrt{\alpha_t} \cdot (x_t - (1-\alpha_t)/\sqrt{1-\bar{\alpha}_t}) \cdot \varepsilon_\theta(x_t, t)$$

## Variance

$$\sigma_t^2 \text{ (Fixed or Learned)}$$

## Reverse Transition Distribution

$$p_\theta(x_{t-1} | x_t) = N(x_{t-1}; \mu_\theta(x_t, t), \sigma_t^2 I)$$