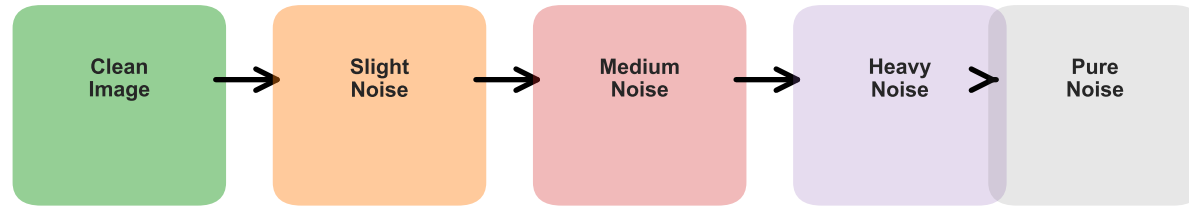


Diffusion: The Reverse Corruption Process

Forward Process: Add Noise

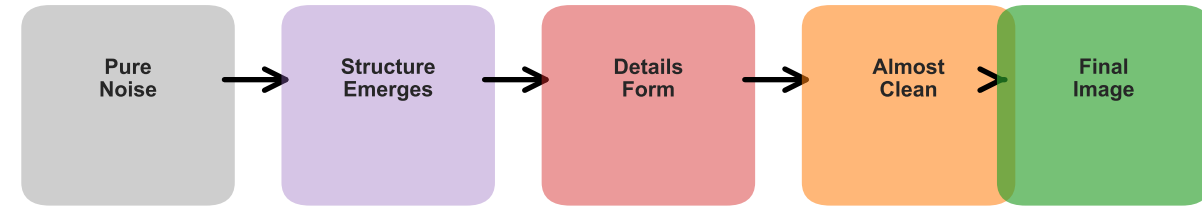


$$q(x_t | x_{t-1}) \sim N(\sqrt{1-\beta_t} x_{t-1}, \beta_t I)$$

Gradually corrupt clean data

1000 tiny steps

Reverse Process: Remove Noise



$$p_{\theta}(x_{t-1} | x_t) - \text{Neural network predicts noise}$$

Learn to reverse corruption

1000 denoising steps