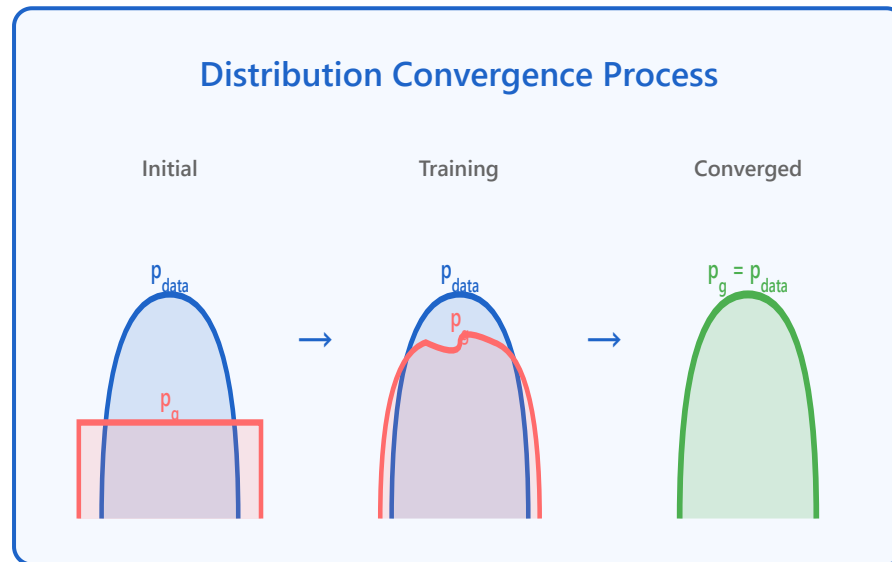


Probability Distribution Perspective



Real Data Distribution

$p_{data}(x)$ - True distribution of training data

Generator Distribution

$p_g(x)$ - Distribution learned by generator

Objective

Minimize distance between distributions

$$D(p_{data} || p_g) \rightarrow 0$$

Sampling Process

- z** Sample from latent space: $z \sim p_z(z)$
- G** Neural network transformation: $G(z)$
- x** Generate sample: $x \sim p_g(x)$

Key Advantages

- ✓ Implicit density modeling
- ✓ No explicit likelihood computation
- ✓ Direct sampling capability