

Differential Privacy

Original Data

+

Calibrated Noise

=

Protected Data 

Mechanisms

Gaussian Mechanism



Laplace Mechanism



Privacy Budget (ϵ)

ϵ remaining

Parameters

ϵ

Privacy Loss
Lower = More Private

δ

Failure Probability
Typically 10^{-5}

Typical Values

$\epsilon = 1-10$
 $\delta = 10^{-5}$