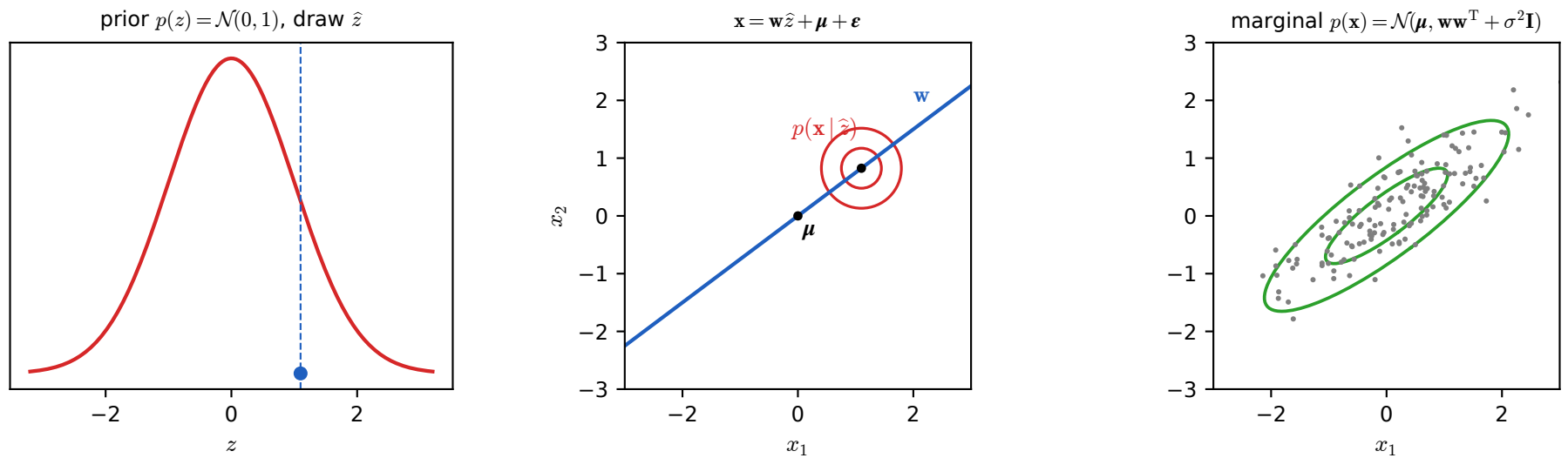

prior $p(z) = \mathcal{N}(0, 1)$, draw $\hat{z}$
z
$\mathbf{x} = \mathbf{w}\hat{z} + \boldsymbol{\mu} + \boldsymbol{\epsilon}$
$p(\mathbf{x} \mid \hat{z})$
$\mathbf{w}$
$\boldsymbol{\mu}$
x_1
x_2
marginal $p(\mathbf{x}) = \mathcal{N}(\boldsymbol{\mu}, \mathbf{w}\mathbf{w}^{\mathrm{T}} + \sigma^2\mathbf{I})$
x_1