

# Training ТЕХНИЧЕСКИЙ СЛАЙД (НА ДОСКЕ)

$$P(w, y|X) = P(y|X, w)P(w)$$

$$P(y|w, X) = \mathcal{N}(y|w^T X, \sigma^2 I)$$

$$P(w) = \mathcal{N}(w|0, \gamma^2 I)$$

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$$\log P(w, y|X) \rightarrow \max_w$$

$$-\frac{1}{2\sigma^2} \|w^T X - y\|^2 - \frac{1}{2\gamma^2} \|w\|^2 \rightarrow \max_w$$

$$\|w^T X - y\|^2 + C\|w\|^2 \rightarrow \min_w$$

