

$$\mathbf{x}_i \text{ positive } (y_i = 1) : \quad \mathbf{x}_i \cdot \mathbf{w} + b \geq 1$$

$$\mathbf{x}_i \text{ negative } (y_i = -1) : \quad \mathbf{x}_i \cdot \mathbf{w} + b \leq -1$$