

# Perceptron

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**Perceptron(Rosenblatt 1958)**

## **Basic Theory**

- Separation happens
- A hyperplane is represented by a vector that is perpendicular to it
  - $\hat{y} = \text{sign}(f(x)) = \text{sign}(\vec{\omega} \cdot \vec{x})$ ;  $\hat{y}$  is prediction,  $f$  is a hyperplane