Logistic Regression

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Resources

- Lecture

- Output need to be [0,1]

- It is a linear classifier, not a real regression

$$P(Y = 0|X) = \frac{1}{1 + \exp(\sum w_i X_i)}$$

Decision boundar:

- Class 0: $P(Y = 0|X) > P(Y = 1|X)$, $\sum w_i X_i < 0$

- Class 1: $P(Y = 0|X) < P(Y = 1|X)$, $\sum w_i X_i > 0$