THE PERCEPTRON

The perceptron is a learning algorithm for binary classification of real valued vectors.

1 Introduction

The perceptron binary classifier can be thought of as the following function,

$$f(\boldsymbol{x}) = \begin{cases} 1 \text{ if } \boldsymbol{w}^T \boldsymbol{x} > 0 \\ 0 \text{ otherwise} \end{cases}$$

The vector $\boldsymbol{w}$ is learned from training data as usual. The algorithm for learning the same is presented in the next section.

2 Learning Algorithm