

Problem Set #3: Deep Learning & Unsupervised Learning

Problem 1 A simple neural network

Let $X = \{x^{(1)}, x^{(2)}, \dots, x^{(m)}\}$ be dataset of m examples with 2 features. That is, $x^{(i)} \in \mathbb{R}^2$. Samples are classified into 2 categories with labels $y \in \{0, 1\}$, as shown in Figure 1. Want to perform binary classification using a simple neural network with the architecture shown in Figure 2.