Machine Learning Exercise 2

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$$z(x) = \begin{bmatrix} 21.84401335497923 \\ -3.777551683915814 \\ 8.617252026405144 \end{bmatrix}^{T} \begin{bmatrix} 1 \\ x_1 \\ x_2 \end{bmatrix}$$

$$g(x) = \frac{1}{1 + e^{-z(x)}}$$

The function z(x) has been computed using logistic regression algorithm using a learning rate of $\alpha = 0.4$ and 1000 iterations.

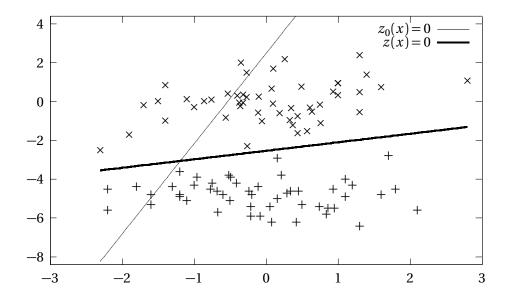


Figure 1: Data points, $z_0(x) = 0$, and z(x) = 0