



The dataset is not linearly separable. Therefore, we will need at least two hidden units. Each hidden unit will represent a line that classifies one of the squares (or crosses) correctly but mis-classifies the other. The output unit will resolve the disagreement between the two hidden units. I am assuming that the symbol \times is positive and the other symbol implies negative class.

All hidden and output units are simple threshold units. Each sign unit will output a $+1$ if $w_0x_0 + w_1x_1 + \dots + w_nx_n > 0$ and -1 else.