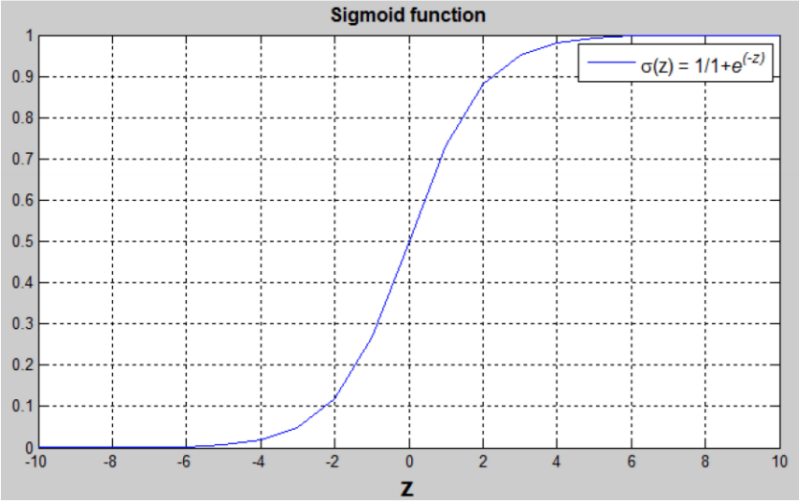
1 Logistic regression

Parameters used in logistic regression :

n_x	:	number of features
$x \in \mathbb{R}^{n_x}$	:	input features vector
$y \in \{0, 1\}$	:	training label
$w \in \mathbb{R}^{n_x}$	:	weights
$b \in \mathbb{R}$	:	threshold
$\hat{y} = \sigma(w^T x + b)$	:	the output
$\sigma(z) = \frac{1}{1+\exp(-z)}$	:	sigmoid function



2 Neural Network

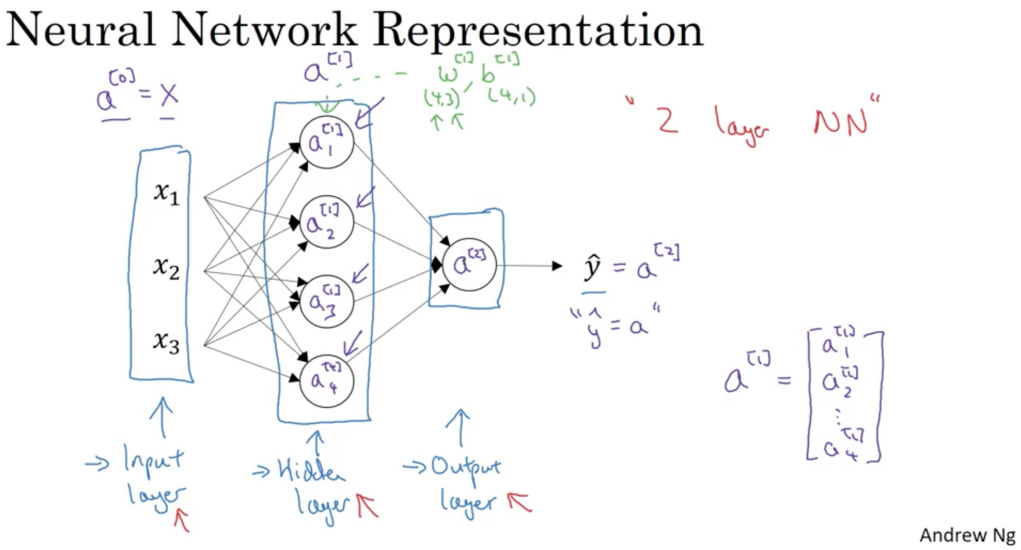


Figure 1: Each node of the neural network corresponds to a different logistic regression computation. For example, $a_1^{[1]} = [w_{11}^{[1]}, w_{12}^{[1]}, w_{13}^{[1]}] \times [x_1, x_2, x_3]^T + b_1^{[1]}$.