



Definition

Given $\beta \in \mathbf{R}, \theta \in \mathbf{R}^d$ the *logistic model* (the *logistic probabilistic model*) corresponding to the parameters β and θ is the function $p : X \rightarrow [0, 1]$ defined by

$$p(x) = \frac{1}{1 + \exp(-\theta^\top x - \beta)}$$

