

Adaptive Basis Function Models

$$f(x) = w_0 + \sum_{m=1}^M w_m \underbrace{\phi_m(x)}$$

m^{th} basis function

$\phi_m(x)$ is learned from data.

$\phi_m(x) = \phi(x, v_m)$ v_m : parameters of $\phi_m(x)$

$\theta = (w_0, w_1, \{v_m\}_{m=1}^M)$ denotes the entire parameter set.



