

Solution 1:

1) The hypothesis space is incorrect. The correct one is:

$$\mathcal{H} = \{f : f(\mathbf{x}) = \theta_0 + \theta_1 \cdot x_{age} + \theta_2 \cdot x_{blood\ pressure} + \theta_3 \cdot x_{weight} \mid \boldsymbol{\theta} \in \mathbb{R}^4\} \quad (1)$$

5) The hypothesis space is incorrect. The correct one is:

$$\mathcal{H} = \{f : f(\mathbf{x}) = \theta_0 + \theta_1 \cdot x_{age} + \theta_2 \cdot x_{blood\ pressure} + \theta_3 \cdot x_{weight} + \theta_4 \cdot x_{weight}^2 \mid \boldsymbol{\theta} \in \mathbb{R}^5\} \quad (2)$$