



Figure 18.5: The neurons of the first hidden layer perform a mapping from the input feature space to the vertices of a unit hypercube. Each region is mapped into a vertex. Each vertex of the hypercube is now linearly separable from all the rest and can be separated by a hyperplane realized by a neuron. The vertex 110, denoted as an unshaded circle, does not correspond to any region.

• Page 908, Eq. (18.59) should read:

$$E(\mathbf{v}, \mathbf{h}) = -\sum_{i=1}^{I} \sum_{j=1}^{J} \theta_{ij} h_i v_j - \sum_{i=1}^{I} b_i h_i - \sum_{j=1}^{J} c_j v_j,$$
(18.59)