

1995 Paper 7 Question 7

Computational Neuroscience

It has been said that there is no universal learning algorithm that can take a sample $S = \{\langle \mathbf{x}_i, f(\mathbf{x}_i) \rangle\}$ of training examples of an arbitrary unknown function f and produce a good approximation to f . Do you agree? Is such an algorithm possible? Discuss with reference to algorithms or methods and their assumptions and biases. [20 marks]