

MLT Homework 5

Ana Borovac
Bas Haver

October 14, 2018

Question 1

($w(h)$ does not have to depend on $n(h)$ and $|\mathcal{H}_{n(h)}|$ only.)

Subquestion 1.1

Consider a hypothesis class $\mathcal{H} = \cup_{n=1}^{\infty} \mathcal{H}_n$, where for every $n \in \mathbb{N}$, \mathcal{H}_n is finite. Find a weighting function $w : \mathcal{H} \rightarrow [0, 1]$ such that $\sum_{h \in \mathcal{H}} w(h) \leq 1$ and so that for all $h \in \mathcal{H}$, $w(h)$ is determined by $|\mathcal{H}_{n(h)}|$

Solution

Question 2

7.5

Solution

Question 3

Solution