



Any Two Learning Algorithms Are (Almost) Exactly Identical

By -

Bibliogov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. This paper shows that if one is provided with a loss function, it can be used in a natural way to specify a distance measure quantifying the similarity of any two supervised learning algorithms, even non-parametric algorithms. Intuitively, this measure gives the fraction of targets and training sets for which the expected performance of the two algorithms differs significantly. Bounds on the value of this distance are calculated for the case of binary outputs and 0-1 loss, indicating that any two learning algorithms are almost exactly identical for such scenarios. As an example, for any two algorithms A and B, even for small input spaces and training sets, for less than $2e(-50)$ of all targets will the difference between As and Bs generalization performance of exceed 1. In particular, this is true if B is bagging applied to A, or boosting applied to A. These bounds can be viewed alternatively as telling us, for example, that the simple English phrase I expect that algorithm A will generalize from the training set with an accuracy of at least 75 on the rest...



READ ONLINE
[6.16 MB]

Reviews

The publication is great and fantastic. I am quite late in start reading this one, but better then never. I discovered this pdf from my dad and i suggested this ebook to discover.

-- **Linnie Kling**

A brand new eBook with a brand new standpoint. I could possibly comprehended everything out of this composed e publication. Your life span will likely be enhance once you total reading this pdf.

-- **Willa Ritchie**