Yoshida, Takuma; Naito, Kanta
Regression with stagewise minimization on risk function. (English) Zbl 07027268

Summary: This paper studies a curve estimation based on empirical risk minimization. The estimator is composed as a convex combination of words (learners) in a dictionary. A word is selected in each step of the proposed stagewise algorithm, which minimizes a certain divergence measure. A non-asymptotic error bound of the estimator is developed, and it is shown that the error bound becomes sharp as the number of iterations of the algorithm increases. A simulation study and real data example confirm the performance of the estimator.

MSC:
62-XX Statistics

Keywords:
non-asymptotic theory; regression; risk minimization; stagewise estimation

Software:
gamair; ElemStatLearn

Full Text: DOI

References:


This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.