

Discussiones Mathematicae
Probability and Statistics 34 (2014) 127–129
doi:10.7151/dmps.1163

A LEARNING ALGORITHM COMBINING FUNCTIONAL DISCRIMINANT COORDINATES AND FUNCTIONAL PRINCIPAL COMPONENTS

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Abstract

A new type of discriminant space for functional data is presented, combining the advantages of a functional discriminant coordinate space and a functional principal component space. In order to provide a comprehensive comparison, we conducted a set of experiments, testing effectiveness on 35 functional data sets (time series). Experiments show that constructed combined space provides a higher quality of classification of LDA method compared with component spaces.

Keywords: functional principal components, functional discriminant coordinates.

2010 Mathematics Subject Classification: 62H25, 62H30, 68T10.

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Received 10 September 2014

Revised 16 September 2014

