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CE > Vol.2 No.3, August 2011

OPEN ACCESS

Teaching PCA through Letter Recognition

PDF (Size: 168KB) PP. 292-295 DOI : 10.4236/ce.2011.23040

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ABSTRACT

This article presents the use of a real life problem to reach a deeper understanding among students of the benefits of principal components analysis. Pattern recognition applied on the 26 letters of the alphabet is a recognizable topic for the students. Moreover it is still verifiable with computer algebra software. By means of well defined exercises the student can be guided in an active way through the learning process.

KEYWORDS

Data Reduction, Eigenvalues, Eigenvectors

Cite this paper

Hecke, T. (2011). Teaching PCA through Letter Recognition. *Creative Education*, 2, 292-295. doi: 10.4236/ce.2011.23040.

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