University of Groningen

Cluster-based adaptive metric classification

Giotis, Ioannis; Petkov, Nicolai

Published in:
Neurocomputing

DOI:
[10.1016/j.neucom.2011.10.018](https://doi.org/10.1016/j.neucom.2011.10.018)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2012

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Giotis, I., & Petkov, N. (2012). Cluster-based adaptive metric classification. *Neurocomputing*, 81, 33-40.
<https://doi.org/10.1016/j.neucom.2011.10.018>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Corrigendum

Corrigendum to “Cluster-based adaptive metric classification” [Neurocomputing 81 (2012) 33–40]

Ioannis Giotis*, Nicolai Petkov

Johann Bernoulli Institute for Mathematics and Computer Science, University of Groningen, PO Box 407, 9700 AK, Groningen, Netherlands

1. On page 33 lines 2–15 of the third paragraph are modified to the following:

The components analysis family of algorithms learns transformations from constraints as explained in the survey of Yang [34]: “Relevant Components Analysis (RCA) [10] learns a global linear transformation from (a set of) equivalence constraints. The learned transformation can be used directly to compute (a) distance between any two examples. Discriminative Component Analysis (DCA) and Kernel DCA [11] improve RCA by exploring negative constraints and aiming to capture non-linear relationships using contextual information. Essentially, RCA and DCA can be viewed as extensions of Linear Discriminant Analysis (LDA) [12]. Neighborhood Component Analysis (NCA) [4] learns a distance metric by extending the nearest neighbor classifier. The Large Margin Nearest Neighbors (LMNN) classifier [6] (further) extends NCA”.

2. On page 34 lines 2–9 of the second paragraph are modified to the following:

As pointed out by Yang [34], “in addition to traditional metric learning that assumes a quadratic form for the distance between any two vectors, (Information Theoretic Metric Learning — ITML) [21] expresses the learning (of the parameters of) a Mahalanobis distance function as a Bregman optimization problem, by minimizing the differential relative entropy (LogDet divergence) between two multivariate Gaussians (that are) subject to linear constraints on the distance function”.

[34] L. Yang, An overview of distance metric learning. Technical report, School of Computer Science, Carnegie Mellon University, 2007.

DOI of original article: <http://dx.doi.org/10.1016/j.neucom.2011.10.018>

* Corresponding author. Tel.: +31 50 363 7126.

E-mail address: i.e.giotis@rug.nl (I. Giotis).