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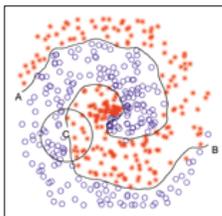
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From the September 2010 Issue...

Local-Learning-Based Feature Selection for High-Dimensional Data Analysis

By Yijun Sun, Sinisa Todorovic, and Steve Goodison



This paper considers feature selection for data classification in the presence of a huge number of irrelevant features. We propose a new feature-selection algorithm that addresses several major issues with prior work, including problems with algorithm implementation, computational complexity, and solution accuracy. The key idea is to decompose an arbitrarily complex nonlinear problem into a set of locally linear ones through local learning, and then learn feature relevance globally within the large margin framework. The proposed algorithm is based on well-established machine learning and numerical analysis techniques, without making any assumptions about the underlying data distribution.

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Editorials and Announcements

- **Editorial**—Editor's Note (August 2010)
- **Call-for-Papers**—Automatic Face and Gesture Recognition - FG2011 (PDF)
- **Editorial**—Editor's Note (May 2010)
- **Announcement**—Serge Belongie shares his top ten TPAMI articles in honor of TPAMI's 30th anniversary
- **Editorial**—Guest Editors' Introduction to the Special Section on Shape Analysis and Its Applications in Image Understanding (April 2010)
- **Announcement**—Associate editors congratulate TPAMI on 30 years


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