

# CALL FOR PAPERS

## ACM Transactions on Intelligent Systems and Technology

### Special Issue on

### "Distance Metric Learning in Intelligent Systems"

Distance Metric Learning (DML) is an important machine learning technique and has played a critical role in various tasks of real-world intelligent systems. Typically, any task that requires dissimilarity/similarity measures has to assume some forms of distance metrics or distance functions, either explicitly or implicitly. For example, Euclidean distance is widely used in many real-world applications, such as face recognition and automated image annotation. Clearly, the choice of distance metrics would significantly affect the performance of the subsequent tasks in the applications, making distance metric learning an important research topic.

A large number of algorithms have been proposed and studied for distance metric learning in recent years. Numerous application have been found for distance metric learning, including pattern recognition, natural language processing, computer vision, computer graphics, multimedia retrieval, web search and mining, bioinformatics, etc. For example, distance metric learning has been applied to improve the accuracy of object recognition, enhance the performance of image/video retrieval, and boost the quality of data clustering. Despite the extensive efforts, there are a number of important issues that need to be further explored and investigated when practicing distance metric learning in various applications. This special issue seeks high-quality articles that aim to advance the state-of-the-art research on distance metric learning, with the focus on solving important and practical issues in deploying distance metric learning to intelligent systems in various domains. We are particularly interested in articles that explore and develop practical distance metric learning techniques as a key component technology of an overall, perhaps large-scale, real-world intelligent system. We emphasize the innovative applications of distance metric learning techniques in real-world intelligent systems. We however do NOT encourage the submission that only focuses on new theories and algorithms for distance metric learning, without demonstrating their impact to real-world applications of specific domains.

Topics of interests include but not limited to:

- Theoretical foundation of distance metric learning in intelligent applications/systems
- Methods and algorithms of distance metric/function learning in real intelligent systems
- Large-scale distance metric learning in real-world intelligent systems
- Applications of distance metric learning techniques to real-world systems in various domains

#### **Submissions:**

On-Line submission: <http://mc.manuscriptcentral.com/tist>

Please select "Special Issue: Distance Metric Learning in Intelligent Systems" as the manuscript type.

Details of the journal manuscript preparation are available on the website: <http://tist.acm.org/>

Each paper will be peer-reviewed by at least three external reviewers.

**Important Dates:**

Manuscript submission:	<b>November 30, 2010</b>	<del>October 15, 2010</del>
Review decision notification:	February 28, 2011	<del>January 15, 2011</del>
Final manuscript due:	March 31, 2011	<del>March 15, 2011</del>
Anticipated publication:	May - June, 2011	

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