Semi-supervised Learning for Visual Computing: Theory and Applications

A Special Track of the 4th International Symposium on Visual Computing (ISVC08) www.isvc.net

Scope:

The focus of this track is on the theory and application of Semi-supervised learning, learning from a combination of both labeled and unlabeled data, has become a topic of significant research interest recently. The framework of semi-supervised learning is applicable to both classification and clustering. In semi-supervised classification, the training can exploit additional unlabeled data, frequently resulting in a more accurate classification function. In semi-supervised clustering, class labels or pair-wise constraints on examples are used to aid unsupervised clustering. Data are grouped using the categories of the initial labeled data as well as unlabeled data in order to modify the existing set of categories which reflect the whole regularities in the data. We encourage submissions that put forward SSL algorithms in visual computing. Topics of interest include but not limited to the following areas.

Topics:

The topics of interest include but are not limited to the following areas:

1. **Semi-supervised classification**
   a. Co-training
   b. Transductive Support Vector Machines
   c. Graph-based method.

2. **Semi-supervised clustering**
   a. Semi-supervised Clustering with Constraints
   b. Semi-supervised Clustering with Distance Metric Learning
   c. Semi-supervised Spectral learning
   d. Semi-supervised Data Co-clustering

3. **Semi-supervised learning application**
   a. (Web) Image Clustering
   b. Shape Classification and Clustering
   c. Posture, Gesture and Interaction Analysis in Video
   d. Image and video retrieval

Paper Submission Procedure:

Papers submitted to ISVC 2008 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **12 pages**, including figures and tables (see http://www.isvc.net for details).

All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.

Important Dates:

Paper submissions	July 21, 2008
Notification of acceptance	September 1, 2008
Final camera ready paper	September 15, 2008
Advance Registration	September 15, 2008
ISVC08 Symposium	December 1-3, 2008

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