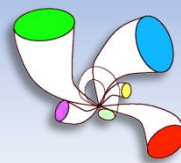


Subspace 2009

The 2nd international workshop on Subspace Methods

September 27, 2009, in conjunction with ICCV2009, Kyoto, Japan

<http://www.cvlab.cs.tsukuba.ac.jp/~subspace/ss2009/index2009.html>



IMPORTANT DATES

- Paper submission due June 15th 2009
- Notification of acceptance July 15th 2009
- Camera ready due August 12th 2009
- Workshop date September 27th 2009

GOAL OF THE WORKSHOP

The goal of the workshop is to share the potential of subspace methods with researchers working on various problems in computer vision, and to encourage interactions which could lead to further developments of subspace methods. The fundamental theories of subspace methods and their applications in computer vision will be discussed at the workshop.

SUBSPACE METHODS

Subspace methods are important for solving many theoretical problems in pattern recognition and computer vision. Also they have been widely used as a practical methodology in a large variety of real applications. Subspace methods have been studied intensively, in particular, in the field of character recognition, contributing to a number of commercial optical character recognition systems. During the last three decades, the area has become one of the most successful underpinnings of diverse applications such as classification, recognition, pose estimation, motion estimation. At the same time, there are many new and evolving research topics: nonlinear methods including kernel methods, manifold learning, subspace update and tracking.

PREVIOUSLY ORGANIZED WORKSHOPS

Prior to this workshop, we have successfully organized three related workshops: an international workshop on subspace methods, Subspace 2007 in conjunction with ACCV2007, and two Japanese workshops, Subspace 2006 and 2008. The number of attendees and submissions for these workshops demonstrate their success. Especially, the Proceedings of the Subspace2007 workshop have been downloaded more than 800 times from the workshop's website from 38 different countries for the first six months. We believe that Subspace 2009 in conjunction with ICCV will stimulate fruitful discussions among the participants and provide novel ideas for future research in computer vision.

SCOPE

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

- Theoretical foundations of subspace methods:

Iijima equation, Watanabe's formulation of CLAFIC theory, subspace methods as degenerated Gaussians, geometry for subspace methods, etc.

- Theoretical extensions of subspace methods:

Construction methodology of subspaces (PCA, CCA, FA, ICA, kernel PCA, etc), nonlinear subspace methods, mutual subspace methods and their theoretical extensions, manifold learning, similarity measures with subspaces, illumination cones, etc.

- Related methods:

Mathematical feature extraction (n-mode SVD), eigenspace methods, discriminant analysis, subspaces in factorization methods

- Applications:

Object recognition, face recognition, gesture recognition, character recognition, motion analysis, scene analysis, robot vision, biometrics, anomaly detection, data visualization, other novel applications

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