Call for Chapters

Intelligent Video Event Analysis and Understanding

To be published in Springer-Verlag in the series "Studies in Computational Intelligence"

We are soliciting high quality chapter submissions for a book of Intelligent Video Event Analysis and Understanding. Extended versions of the best papers from the VECTaR2009 workshop, as well as other high quality submissions will be considered

Introduction

Detecting, intepreting and understanding varous video events is one of the untimate goals of the computer vision system. Despite rapid progress in this area, there are still a significant number of challenges that need to be addressed to enable an automatic video event undertanding system. Those challengings include robust detection of event under motion clutters, event interpretation under complex scenes, multi-level semantic event inference, putting event in context and multple cameras, event inference from object interactions, etc.

To address these and other outstanding challenges, high-quality chapter manuscripts are particularly welcome in the following areas, but not limited to:

- Motion interpretation and grouping
- Human action representation and recognition
- Abnormal event detection
- Contextual event inference
- Event recognition among a distributed camera network
- Multimodal event recognition
- Spatial temporal features for event categorisation
- Hierarchical event recognition
- Probabilistic graph models for event reasoning
- Machine learning for event recognition
- Global/local event descriptors
- Metadata construction for event recognition
- Bottom up and top down approaches for event recognition
- Event-based video segmentation and summarization
- Video event database gathering and annotation
- Efficient indexing and concepts modelling for video event retrieval
- Semantic-based video event retrieval
- Online video event tagging
- Evaluation methodologies for event-based systems
- Event-based applications (security, sports, news, etc.)

Objectives:

This book aims to present state-of-the-art research advances of video event understanding technologies. It will provide reseachers and practinioners a richful resouce for future research directions and successful practice. It could also serve as a reference tool and handbook for researchers in a number of applications including visual surveillance, human-computer interaction, video search and indexing etc. Its potential audience will be composed of active researchers and practitioners as well as graduate students working on video analysis in various disciplines such as computer vision, patten recogntion, information security, artifical intelligence, etc.

Submission Procedure

Researchers and practitioners are invited to submit chapter proposals before November 30, 2009. The chapter proposals should contain a title, an abstract, and the outline of the organization. The proposals will be considered based on the relevance to the book, contribution to the community, as well as the balance of topics. Authors of accepted proposals will be notified by December 15, 2009. Full chapters are expected to be submitted by April 30, 2010. All chapter manuscitpts will be double-blind reviewed.

Authors should prepare their manuscripts by following the instructions in Springer-Verlag's author's guidelines for the series "Studies in Computational Intelligence" at http://www.springer.com/series/7092

Submissions of chapter proposals and inquiries should be forwarded by email to the editors at ***videoevent09@googlemail.com***.

Important Dates:

Submission of Chapter Proposals	November 30, 2009
Notification of Chapter Proposals	December 15, 2009
Submission of Full Chapters	April 30, 2010
Final Decision on Accepted Chapters	June 15 , 2010
Camera-Ready Submission	July 31, 2010

Guest Editors:

Dr. Jianguo Zhang, Queen's University Belfast, UK
Dr. Ling Shao, The University of Sheffield, UK
Dr. Lei Zhang, Microsoft Research Asia, China
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About The Series

The series "Studies in Computational Intelligence" (SCI) publishes new developments and advances in the various areas of computational intelligence – quickly and with a high quality. The intent is to cover the theory, applications, and design methods of computational intelligence, as embedded in the fields of engineering, computer science, physics and life science, as well as the methodologies behind them. The series contains monographs, lecture notes and edited volumes in computational intelligence spanning the areas of neural networks, connectionist systems, genetic algorithms, evolutionary computation, artificial intelligence, cellular automata, self-organizing systems, soft computing, fuzzy systems, and hybrid intelligent systems. Critical to both contributors and readers are the short publication time and world-wide distribution - this permits a rapid and broad dissemination of research results.

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