The First ACM International Conference on Multimedia Retrieval (ICMR), puts together the long-lasting experience of former ACM CIVR and ACM MIR. It is the ideal forum to present and encounter the most recent developments and applications in the area of multimedia content retrieval. Originally set up to illuminate the state-of-the-art in image and video retrieval, ICMR aims at becoming the world reference event in this exciting field of research, where researchers and practitioners can exchange knowledge and ideas.

HIGHLIGHTS

Technical Program
Practitioner Day
Welcome Reception & Social dinner
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HIGHLIGHTS

- Technical Program
- Practitioner Day
- Welcome Reception & Social dinner

www.acmICMR.org
CALL FOR PAPERS

ICMR 2011 is seeking original high quality submissions addressing innovative research in the broad field of multimedia retrieval. We wish to highlight significant contributions addressing the main problem of search and retrieval but also the related and equally important issues of multimedia content management, user interaction, and community-based management. Topics of interest include, but are not limited to:

- Content- and context-based indexing, search and retrieval of images and video
- Multimedia content search and browsing on the Web
- Advanced descriptors and similarity metrics for audio, image, video and 3D data
- Multimedia content analysis and understanding
- Semantic retrieval of visual contents
- Learning and relevance feedback in media retrieval
- Query models, paradigms, and languages for multimedia retrieval
- Multimodal media search
- Human perception based multimedia retrieval
- Studies of information-seeking behaviour among image/video users
- Affective/emotional interaction or interfaces for image/video retrieval
- HCI issues in multimedia retrieval
- Evaluation of multimedia retrieval systems
- High performance multimedia indexing algorithms
- Database architectures for multimedia retrieval
- Novel multimedia data management systems and applications
- Community-based multimedia content management
- Retrieval from multimodal lifelogs
- Interaction with medical image databases
- Satellite imagery analysis/retrieval
- Image/video summarization and visualization

IMPORTANT DATES

- October 15, 2010 : Special Session and Tutorials Proposals
- November 5, 2010 : Special Session and Tutorials Selection
- December 15, 2010 : Paper Submission
- February 23, 2011 : Notification of acceptance
- March 4, 2011 : Submission of camera-ready papers
### TECHNICAL PROGRAM

#### Program at a glance

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<th>DAY 2 (Tue. 19)</th>
<th>DAY 3 (Wed. 20)</th>
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<tr>
<td>8:45</td>
<td>Opening</td>
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<tr>
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<td>S1P1</td>
<td>S5P2</td>
<td>Demo Session with Coffee</td>
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<td>10:40</td>
<td>S1P2</td>
<td>S5P3</td>
<td>User/Industrial session</td>
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<td>11:00</td>
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<td>14:20</td>
<td>Poster session 1</td>
<td>Poster session 2</td>
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<td>Panel session</td>
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<td>17:40</td>
<td>S3P5</td>
<td>End Day 2</td>
<td>Closing remarks</td>
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<tr>
<td>18:00</td>
<td>End Day 1</td>
<td>Social event</td>
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### Detailed Program

- **Opening** (8:45 AM)
- **Keynote speech (oral)** (9:00 AM)
- **Session 1 (oral)** (10:00 AM)
- **Session 2 (oral)** (12:00 PM)
- **Lunch (12:40 PM - 1:30 PM)**
- **Poster session 1** (14:20 PM)
- **Session 3 (oral)** (16:00 PM)
- **End Day 1** (18:00 PM)
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| 95 | Social Media Driven Image Retrieval  
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| 123 | Active Learning through Notes Data in Flickr: An Effortless Training Data Acquisition Approach for Object Localization  
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| 104 | Saliency Moments for Image Categorization  
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| 106 | 3D Model Retrieval using Accurate Pose Estimation and View-based Similarity  
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| 59 | Lost in Binarization: Query-Adaptive Ranking for Similar Image Search with Compact Codes  
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| 88 | A Kernel Density Based Approach for Large Scale Image Retrieval  
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| 110 | Pairwise Weak Geometric Consistency for Large Scale Image Search  
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| 169 | Finding Media Illustrating Events  
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| 68 | Accurate Video Content-Based Copy Detection with Efficient Feature Indexing  
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| 117 | Semantic Combination of Textual and Visual Information in Multimedia Retrieval  
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| 22 | Biometric Animal Databases from Field Photographs: Identification of Individual Zebra in the Wild  
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| 63 | Attribute-based Vehicle Search in Crowded Surveillance Videos  
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| 77 | Scalable Logo Recognition in Real-world Images  
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A. Ulges, C. Schulze  
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Spatial Codebooks for Image Categorization  
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Multimedia User Interaction

ICMR07  
Embracing Semantics in Zoomable User Interface  
Daniele Panza, Andrea Vitali, Alexandre Sentinelli, Luca Celetto

ICMR08  
Image and Video Browsing with a Cylindrical 3D Storyboard  
Klaus Schoeffmann, Laszlo Boeszoernyi

ICMR09  
The Hyper Media News System for Multimodal and Personalised Fruition of Informative Content  
Alberto Messina, Maurizio Montagnuolo, Riccardo Di Massa, Andrea Elia

ICMR14  
Considerations for a Touchscreen Visual Lifelog  
Niamh Caprani, Noel O’Connor, Cathal Gurrin

ICMR19  
RetrievalLab - A programming tool for content based retrieval  
Ard Oerlemans, Michael S. Lew

ICMR21  
Multimedia Retrieval in Social Networks for Photo Book Creation  
Mohamad Rabbath, Philipp Sandhaus, Susanne Boll

ICMR25  
Photo Summary: Automated Selection of Representative Photos from a Digital Collection  
Stefanie Nowak, Ronny Paduschek, Uwe Kühnert

ICMR26  
A flexible environment for multimedia management and publishing  
M. Bertini, A. Del Bimbo, G. Ioannidis, A. Stan, E. Bijk

Efficient and Precise Multimedia Understanding

ICMR06  
Landmark recognition in VISITO: VIsual Support to Interactive TOurism in Tuscany  
Giuseppe Amato, Paolo Bolettieri, Fabrizio Falchi

ICMR10  
City Exploration by use of Spatio-temporal Analysis and Clustering of User Contributed Photos  
Symeon Papadopoulos, Christos Zikolis, Stefanos Kapiris, Yiannis Kompatsiaris, Athena Vakali

ICMR11  
Lookapp - Interactive Construction of Web-based Concept Detectors  
Damian Borth, Adrian Ulges, Thomas M. Breuel

ICMR15  
High-level Event Detection System Based on Discriminant Visual Concepts  
Ioannis Tsampoulatis, Nikolaos Gkalelis_x0003_, Anastasios Dimou, Vasileios Mezaris, Ioannis Kompatsiaris

ICMR17  
Instant Bag-of-Words served on a Laptop  
Jasper Uijlings, Ork de Rooij, Daan Odijk, Arnold Smeulders, Marcel Worring

ICMR18  
PhotoCube: Effective and Efficient Multi-Dimensional Browsing of Personal Photo Collections  
Grímur Tómasson, Hlynur Sigurðsson, Björn Þór Jónsson, Laurent Amsaleg

ICMR23  
A Parallel Cross-Modal Search Engine over Large-Scale Multimedia Collections with Interactive Relevance Feedback  
Marc von Wyl, Hisham Mohamed, Eric Bruno, Stephane Marchand-Maillet

ICMR24  
Automated Detection of Errors and Quality Issues in Audio-Visual Content  
Ronny Paduschek, Stefanie Nowak, Uwe Kühnert
Practitioners Day Program

09.00-10.00 Keynote: Beyond relevance (Roelof van Zwol)
10.00-12.00 Flash presentations of demos, and demo session with coffee.
12.00-12.30 Attribute-based Object Retrieval (Rogerio Feris)
12.30-01.00 Multimedia Research at FXPAL: Combining Analysis with Innovative User Interfaces (Andreas Girgensohn)
01.00-02.20 Lunch
02.20-02.50 Multimedia mining for real world applications (Adrian Popescu)
02.50-03.20 Recent research activities in KDDI R&D Laboratories (Yusuke Uchida)
03.20-03.40 Coffee
03.40-04.10 Videntifier Forensic - Automatic Video Identification for Police Authorities (Björn þór Jónsson)
04.10-05.00 European Projects - PetaMedia and WeKnowIt
05.00-06.00 Panel discussion

Registrations - If you intend to attend the practitioners day only, you can pre-register by sending an email to icmr2011@disi.unitn.it. The registration fee of 200 Euros can be collected onsite or via bank transfer.

Abstracts of the industrial sessions talks

Attribute-based Object Retrievals (Rogerio Feris, IBM T. J. Watson Research Center) - Searching for objects of interest in surveillance videos, in particular suspicious vehicles and pedestrians, is a common and important task in criminal investigation processes. Current solutions to automate this task are usually based on face recognition or license plate recognition, which are known to be sensitive to typical surveillance conditions such as lighting changes, pose variation, and low-resolution imagery. In this talk, I will describe a novel and complementary object search framework based on parsing of object parts and fine-grained attributes. At the interface, the user can specify queries such as "show me the bald people who entered a given building last Saturday wearing a red shirt and sunglasses" or "show me all blue trucks larger than 7ft length traveling at high speed northbound yesterday from 2pm to 5pm" and the system will retrieve events that match the provided description. I will cover our attribute detection methods which utilize large amounts of data as well as a novel attribute ranking and image retrieval approach based on pairwise modeling of attributes.

Multimedia Research at FXPAL: Combining Analysis with Innovative User Interfaces (Andreas Girgensohn, FX Palo Alto Laboratory) - FXPAL has been active in multimedia research for the past 15 years. An overarching theme of our work is to combine analysis with innovative user interfaces. Throughout, our systems consistently combine flexible and powerful user interfaces with established content analysis methods. We balance automation and user control to simplify tasks where possible while
encouraging user creativity. We highlight this in a tour through several projects we have worked on over the years. One of our early systems, MBase, supported the browsing of video collections by displaying video summaries similar to comic books. That collection was also accessible through a 3D interface that represented the video collection as a cityscape with summaries pasted onto the buildings. Another of our video summarization techniques produced collages reminiscent of stained glass windows. We worked on making video editing easy and introduced a form of hypervideo that affords simple navigation. In the area of video surveillance, we created a realistic testbed with 20 cameras in our office building and developed innovative user interfaces for quickly accessing events in video or for tracking people across cameras. More recently, we have focused on supporting search in a publicly accessible lecture webcast search engine and by participating in the TRECVID interactive search evaluation. A recurring research focus has been the management of personal photo collections. We created an application that automatically divides photos into meaningful events such as a birthday party. Another application presented a visual workspace using multiple similarity criteria to layout photos. We also worked on paper user interfaces where a photograph taken of printed content leads to associated multimedia content.

Multimedia mining for real world applications (Adrian Popescu, CEA LIST) - Multimedia research has flourished these last years but the integration of recent developments in working applications is still far from satisfactory. In this context, the talk describes some of the challenges derived from CEA LIST’s positioning as a facilitator between academic research and industry. This positioning is illustrated by a number of techniques developed in our lab, which cover a broad range of multimedia related subjects and are oriented towards easy integration in real world applications. The first part of the talk introduces a shared boosting algorithm devised to perform large scale visual concept detection for still images. The performances of the algorithm are comparable to those of state of the art methods, while its computational complexity is significantly reduced. The second part presents a movie character recognition and tracking algorithm which integrates active appearance models and improved feature extraction. The third part introduces our work on multimedia fusion, with a focus on real time query modeling and visual reranking of text retrieval results. Before pointing out current and future challenges, some geotagged content mining results, such as POI extraction, geographic image retrieval or trip characterization, are discussed.

Recent research activities in KDDI R&D Laboratories (Yusuke Uchida, KDDI R&D Laboratories) - We introduce recent research activities in KDDI R&D Laboratories. Music-driven animation on smart phones: to provide new music experience for users, we have developed an Android application on smart phones, which automatically generates animations in real time where your favorite character dances to your favorite music. Hybrid no reference video quality assessment: an accurate NR quality assessment system based on an analysis of video bitstream provides fully automated quality check after file-based content authoring for VoD, Blu-ray Disk, DVD, and so on. Free-viewpoint 3D video: Free Viewpoint Video (FVV) technology makes it possible to feel as if to move freely in the space of the viewing scene. We realized absolute Free Viewpoint Video with 3D from limited number of cameras. Content-based music analysis and applications: we have focused on content-based analysis of music, and development of various applications to expand the user music experience. Major achievements include content-based music search and visualization, automatic DJ mixing, and generation of music slideshows using Web images.

Videntifier Forensic- Automatic Video Identification for Police Authorities (Björn þór Jónsson, Videntifier) - Videntifier™ Forensic is a service that assists police authorities by automatically identifying video material on seized storage devices. When police forces get to know about a suspect of downloading or distributing illegal video content (e.g. child abuse material, terrorist and hatred propaganda, copyrighted material) and they seize the suspect’s computer and storage devices, it is very stressful and time-consuming work to look through the material in order to find the evidence. Videntifier™ Forensic is doing this task automatically by watching the visual content of videos, working like human vision. It is using fine-grained visual fingerprints to pursue this task combined with blazingly fast and scalable data mining technology.

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Monday, 18 April 2011. Mobile Visual Search

Prof. Bernd Girod, Stanford University

Handheld mobile devices, such as camera phones or PDAs, are expected to become ubiquitous platforms for visual search and mobile augmented reality applications. For mobile image matching, a visual database is typically stored at a server in the network. Hence, for a visual comparison, information must be either uploaded from the mobile to the server, or downloaded from the server to the mobile. With relatively slow wireless links, the response time of the system critically depends on how much information must be transferred in both directions. We review recent advances in mobile matching, using a "bag-of-visual-words" approach with robust feature descriptors, and show that dramatic speed-ups and power savings are possible by considering recognition and compression jointly. We will use real-time implementations for different example applications, such as recognition of landmarks or CD cover, to show the benefit from image processing on the phone, the server, and/or both.

Bernd Girod is Professor of Electrical Engineering and (by courtesy) Computer Science in the Information Systems Laboratory of Stanford University, California. He was Chaired Professor of Telecommunications in the Electrical Engineering Department of the University of Erlangen-Nuremberg until 1999. His research interests are in the areas of video compression, networked media systems, and image databases. He has published over 450 conference and journal papers, as well as 5 books. Professor Girod has been involved in several startup ventures, among them Polycom (Nasdaq:PLCM), Vivo Software, 8x8 (Nasdaq: EGHT), and RealNetworks (Nasdaq: RNWK). He received the Engineering Doctorate from University of Hannover, Germany, and an M.S. Degree from Georgia Institute of Technology. Prof. Girod is a Fellow of the IEEE and of EURASIP and a member of the German National Academy of Sciences. He received the 2002 EURASIP Best Paper Award, the 2004 EURASIP Technical Achievement Award, and the 2007 IEEE Multimedia Communication Best Paper Award.

Wednesday, 20 April 2011. Beyond relevance

Dr. Roelof van Zwol, Yahoo! Research

Finding similar and relevant media content given a user query or sample image has been at the core of the multimedia retrieval community for a long time. In this talk, I will identify and address multimedia challenges that play a role at Yahoo!, and which go beyond relevancy of images and video to a given multimedia retrieval task. The true challenge for multimedia is to find a balance between relevancy, freshness, quality, interestingness and diversity in order to provide an engaging rich media experience to the
Roelof van Zwol is a senior research scientist at Yahoo! Research, where he is managing the multimedia research team. He has more than 10 years of international research experience in multimedia, information retrieval, (social) media mining, object ranking, spatial search, XML, databases, and machine learning. He is passionate about conducting research in an industrial context and to apply the outcomes in high-impact end-user services. His work on object ranking now powers the left-rail search suggestions in Yahoo!’s Web and image search engine. Prior to joining Yahoo he was an assistant professor at Utrecht University in the Netherlands. He received his Ph.D. in Computer Science in 2002 from the University of Twente in the Netherlands. Roelof van Zwol is the author of more than 70 peer reviewed publications, a number of which appeared in first-tier conferences such as SIGIR, WWW, and ACM Multimedia. He is an active member of the research community, who serves on the PC of conferences such as SIGIR, WWW, ACM Multimedia, CIVR, and ICMR. He was co-chair of CIVR in 2009, and organizer of the second CHORUS conference on Multimedia Search, as well as the organizer of 5 workshops themed around Web search, multimedia, and information retrieval. In European context, he was the technical coordinator of the Semedia EU project on search environment on Media, and project manager in the WeKnowIt EU project.

IMPORTANT DATES

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ICMR 2011 will include only one Special Sessions for innovative and frontier topics in the field of multimedia retrieval.

**Title:**
**Automatic Tagging and Geo-Tagging in Video Collections and Communities**

**Chair:**
Dr. Martha Larson  
(Multimedia Information Retrieval Lab, Delft University of Technology, Netherlands)

**Abstract**
Subject labels and tags are a convenient and effective form of metadata that support users in quickly and easily finding and re-finding video content. In video archives and other curated video collections, labeling content with keywords is a longstanding practice. Although the use of metadata in the form of tags and geo-tags is widespread and well established, surprisingly many multimedia items remain under-annotated, or completely un-annotated. This special session is dedicated to the presentation of algorithms developed to automatically tag or geo-tag videos. The novelty of such algorithms is that they exploit the full range of information sources available in video collections and communities. These sources include not only the spoken and visual content of the video, but also associated textual metadata, collateral text sources and the social context. The motivation for this special session is to provide a forum that presents research that brings together established multimodal approaches to annotation, with new methods that make use of user-contributed annotations and other social information. This special session complements other events that bring together scientists from the research community around the topics of social media computing and multimedia. The contribution that will make to ICMR 2011 lies in the uniqueness of the elements it combines. The work presented in the special session brings proven techniques from the areas of multimodal content analysis and information retrieval (IR) together with new techniques that exploit the advantages of the collection context and social community. The special session also aims to raise awareness in the multimedia retrieval community of the important research benefits that can be derived from organizing and participating in benchmark evaluations.

**Papers**

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<td>Multi-modal, Multi-resource Methods for Placing Flickr Videos on the Map</td>
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<td>March 4, 2011</td>
<td>Submission of camera-ready papers</td>
</tr>
</tbody>
</table>

Advancing Computing as a Science & Profession
TUTORIALS

Important: We are sorry to inform you that the minimum number of subscriptions for the activation of the ICMR 2011 Tutorials has not been received. For this reason they have been cancelled by the program.

IMPORTANT DATES

October 15, 2010 : Special Session and Tutorials Proposals
November 5, 2010 : Special Session and Tutorials Selection
December 15, 2010 : Paper Submission
February 23, 2011 : Notification of acceptance
March 4, 2011 : Submission of camera-ready papers
ORGANIZING COMMITTEE

Honorary Chair:
Ramesh Jain (UC Irvine)

General Co-Chairs:
Francesco G.B. De Natale (Univ. Trento)
Alberto Del Bimbo (Univ. Florence)

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Panel Chair:
Wolfgang Nejdl (Univ. Hannover)

Practitioner Co-Chairs:
Andrea de Polo (Alinari)
Vanessa Murdock (Yahoo!)

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Cees Snoek (Univ. Amsterdam)
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Publication Chair:
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Web Chair:
Andrea Rosani (Univ. Trento)
Paper Submission

Paper Template

Papers must be formatted according to the ACM conference style.

Papers must not exceed 8 pages in 9 point font and must be submitted as pdf files.

While submitting the paper, please make sure that the names and affiliations of the authors are included in the document.

Either the Microsoft Word or LaTex format are accepted. The paper templates can be downloaded directly from the ACM website

- Microsoft Word Template
- LaTex Template using the "option 1" style.

Online Paper Submission

Paper submission will be managed through the Microsoft CMT. Click here to submit a new paper.

Instructions for Camera Ready Preparation and Copyright Form

Please make sure that the your paper does not exceed 8 (eight) pages and should include in the title page the ACM copyright statement, as follows:

"Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. ICMR’11, April 17-20, Trento, Italy Copyright © 2011 ACM 978-1-4503-0336-1/11/04 $10.00"

The paper templates can be downloaded directly from the ACM website

- Microsoft Word Template
- LaTex Template using the "option 2" style.

You can find HERE a Latex template pre-compiled with the copyright statement.

In case the paper does not include all the necessary information, it will be excluded from publication in the ACM Digital Library.

Papers Registration

Please notice that the papers registration MUST BE completed by March 10, 2011. EVERY
paper must be associated to a FULL (non-Student) registration, and every full registration can cover up to 2 papers.

**Invitation Letters**

Letters of invitation will be provided as long as you have completed the registration procedure and the payment has been confirmed. After you have registered, please contact convegni@unitn.it and the invitation letter will be sent to you.
CALL FOR DEMOS

Aims and Scope

The First ACM International Conference on Multimedia Retrieval (ICMR), puts together the long-lasting experience of former ACM CIVR and ACM MIR. It is the ideal forum to present and encounter the most recent developments and applications in the area of multimedia content retrieval. Originally set up to illuminate the state-of-the-art in image and video retrieval, ICMR aims at becoming the world reference event in this exciting field of research, where researchers and practitioners can exchange knowledge and ideas.

ICMR 2011 is accepting proposals for technical demonstrators that will be showcased during the conference. The session will include demonstrations of latest innovations by research and engineering groups in industry, academia and government. ICMR 2011 is seeking original high quality submissions addressing innovative research in the broad field of multimedia retrieval. Demonstrations can be related to any of the topics defined by ICMR as shown in the call for papers. The technical demonstration showcase will run concurrently with regular ICMR sessions in the poster area.

Paper Submission

Papers must be formatted according to the ACM conference style. Papers must not exceed 2 pages in 9 point font and must be submitted as pdf files. While submitting the paper, please make sure that the names and affiliations of the authors are included in the document. Either the Microsoft Word or LaTeX format are accepted. The paper templates can be downloaded directly from the ACM website at http://www.acm.org/sigs/publications/proceedings-templates

All demo submissions will be peer-reviewed to ensure maximum quality and accepted demo papers will be included in the conference proceedings. The best demo will be awarded and announced during the Social Event.

Please submit your demo description by _email_ to the demo chair: Cees Snoek (cgmsnoek AT uva DOT nl).

Contact

Cees G. M. Snoek, University of Amsterdam (Netherlands)

IMPORTANT DATES

January 31, 2011: Submission deadline
February 28, 2011: Notification of acceptance
March 4, 2011: Camera-ready version due
The conference is hosted @ the Department of Information Engineering and Computer Science (DISI) in the new building named "Polo Tecnologico Fabio Ferrari".
DISI is located at Povo, in a beautiful spot on the east slopes of Trento. It is hosted in the new building "Polo Tecnologico Fabio Ferrari" close to the Istituto per la Ricerca Scientifica e Tecnologica (FBK-irst).

How to reach the conference location

By bus. Route 5. This is the quickest route up the hill from the city center. The trip takes about 10 minutes. Board at the "Piazza Dante" stop in front of the train station or at the "Piazza Venezia" stop. Get off at the "Povo - Facolta di Scienze" stop just after the blue sign for "Povo". Route times are displayed at every stop. The stop names are shown on bus stop placards. Tickets can be purchased at newsstands. Get them before boarding.

Route 13. Getting to DISI from the city center takes much more time on this bus, but it might be useful if you are in the southern area of the city. Get off at the "Povo - Piazza Manci" stop and walk down the hill to get to the Department. Route times are displayed at every stop. The stop names are shown on stop placards. Tickets can be purchased at newsstands. Get them before boarding. Times and fares are available at the Trentino Trasporti web site

By car. From the TRENOTO CENTRO motorway exit: Exit the motorway at TRENOTO CENTRO. Take the bypass road toward PADOVA. Follow the signs to TN EST (S. Dona, etc.) You will pass through a short tunnel. Just after it, turn left, then immediately to the right and down a steep hill that passes through the S. Dona neighborhood. Shortly you will come to a roundabout. Cross over the bridge to go toward POVO. Follow the road for about 2km until the next roundabout. Take the street at the far left, and go about 400 meters. You enter by foot to the left, downstairs. After 100 meters is the entrance to the parking lot that is under the building. Here's a good link for getting detailed driving directions: www.viamichelin.it

By taxi. Find one just outside the train station at the taxi stand to the right as you exit. Or call Radio Taxi at 0461 930002. The cost is 10 to 15 euros.

HOW TO REACH TRENOTO

By car. You can reach Trento on the following roads: Strada Statale dell'Abetone e del Brennero; Autostrada del Brennero - A22 motorway, phone no. (+39) 0461 980085; Superstrada della Valsugana for those coming from Venice, and Strada Statale 45 bis (Gardesana Occidentale), for those coming from Brescia.

By train. Two main lines reach Trento: the Brennero line (connecting to Rome to the south, and Innsbruck and northern Europe to the north) and the Valsugana line to Venice. Timetable details from Trenitalia.

By plane. The following airports are the closest to Trento:

- Verona Catullo Airport
- Venezia Marco Polo
- Milano Linate
- Milano Malpensa
**Trento** is connected with the main airports by the A22 Brennero Motorway and by the railway. A shuttle service to reach the centre of Milan is guaranteed for travellers arriving in Malpensa and Linate. Buses leave every 20-30 minutes 24 hours a day.

For those arriving in Verona (Valerio Catullo airport) or Brescia (Montichiari Airport) there is a shuttle bus service to Verona railway station every day, leaving every 20 minutes from 6.30 in the morning until 11.35 p.m.

For those arriving in Bergamo (Orio al Serio airport) there is a shuttle bus service to Bergamo railway station, leaving every 15 minutes from 6.05 to 00.15; to Milano Centrale railway station leaving every 20 minutes from 04.30 to 01.00 and to Brescia railway station.

For those arriving in Venice (Marco Polo Airport) there are buses to Venezia-Santa Lucia and Mestre-Venezia railways stations.
WELCOME RECEPTION - Castello Buonconsiglio Trento

The welcome event is organized in the "Sala Marangonerie" @ Castello del Buonconsiglio in the city center of Trento. Reception will start Sunday 17th, at 7 p.m. Please see the map below for directions.

Castello del Buonconsiglio
Via Bernardo Clesio, 5
38122 Trento
Italy
www.buonconsiglio.it

SOCIAL DINNER - CANTINE ROTARI - Mezzocorona

The social dinner has been organized in the amazing contest of the "Cantine Rotari", a beautiful winery among vineyards close to Trento. Wine store will be opened before the Social Dinner.
A bus will take you to and get back from the social dinner, departing from "Piazza Dante" in Trento at 7:30 p.m. on Tue 19. Please see the map below for further directions.

Cantina Rotari - NOSIO S.p.a.
ACCOMODATION

Participants to the conference can take advantage of special rates, thanks to an agreement between the University of Trento and the hotels. All those intending to enjoy these facilitations must do their own reservation directly at the hotel, qualifying themselves as participants to the conference, and asking for the special rate reserved to the University of Trento.

Information about your arrival and departure, cancellation, and any other changes must be communicated directly to the hotel.

We suggest booking the room as soon as possible and no later than March 17th. See at the end of the page the Hotels Map.

<table>
<thead>
<tr>
<th>HOTEL</th>
<th>ADDRESS</th>
<th>SINGLE ROOM</th>
<th>DOUBLE/DUPLICATE SINGLE USE ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel Accademia ****</td>
<td>Vicolo Colico 4/6 38122 Trento Tel. +39 0461 233600 Fax +39 0461 230174 <a href="mailto:info@accademiahotel.it">info@accademiahotel.it</a></td>
<td>70 Euro</td>
<td>125 Euro / 83 Euro</td>
</tr>
<tr>
<td>Hotel America ***</td>
<td>Via Torre Verde 50 38122 Trento Tel. +3900461 983010 Fax +39 0461 230603 <a href="mailto:info@hotelamerica.it">info@hotelamerica.it</a></td>
<td>68 Euro</td>
<td>104 Euro</td>
</tr>
<tr>
<td>Hotel Albermonaco ***</td>
<td>Via Torre d’Augusto 25 38122 Trento Tel. +39 0461 983060 Fax +39 0461 983681 <a href="mailto:info@albermonaco.it">info@albermonaco.it</a></td>
<td>63 Euro</td>
<td>95 Euro / 73 Euro / Triple room 105 Euro</td>
</tr>
<tr>
<td>Grand Hotel Trento ****</td>
<td>Via Alfieri 1 38122 Trento Tel. +39 0461 271000 Fax +39 0461 271001 <a href="mailto:congress@grandhotelrento.com">congress@grandhotelrento.com</a> <a href="mailto:reservation@grandhotelrento.com">reservation@grandhotelrento.com</a></td>
<td>93 Euro (classic)</td>
<td>103 Euro (classic)</td>
</tr>
<tr>
<td>Hotel Garni Aquila D’Oro ***</td>
<td>Via Belenzani 76 38122 Trento Tel.0461/986282. <a href="mailto:info@aquiladoro.it">info@aquiladoro.it</a></td>
<td>78 Euro/88 Euro(Queen Size)</td>
<td>142 Euro / 102 Euro</td>
</tr>
<tr>
<td>Hotel Venezia</td>
<td>Piazza Duomo 45 - via Belenzani 70 38122 Trento</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**</td>
<td>Tel. 0461/234114 Fax 0461/234559 <a href="mailto:Info@hotelveneziatn.it">Info@hotelveneziatn.it</a></td>
<td>42 Euro</td>
<td>52 Euro / 56 Euro</td>
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<tr>
<td>** Bed &amp; Breakfast</td>
<td>Eden **</td>
<td></td>
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<tr>
<td>** Via S. Giovanni</td>
<td>36 (Piazza Santa Maria Maggiore) 38122 Trento 339 3650981 <a href="mailto:Info@bbbeden.it">Info@bbbeden.it</a></td>
<td>45 Euro</td>
<td>60 Euro</td>
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<tr>
<td>** Ostello Giovane</td>
<td>Europa **</td>
<td></td>
<td></td>
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<tr>
<td>** Via Torre Vanga</td>
<td>9 38122 Trento Tel. +39 0461 263484 Fax +39 0461 222517 <a href="mailto:trento@gayaproject.org">trento@gayaproject.org</a></td>
<td>26 Euro</td>
<td>21.5 Euro / Triple room 18.50 Euro</td>
</tr>
<tr>
<td>** Hotel Everest **</td>
<td>***</td>
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<tr>
<td>** Corso Alpini</td>
<td>16 38122 Trento Tel. +39 0461 825300 Fax +39 0461 824527 <a href="mailto:info@hoteleverest.it">info@hoteleverest.it</a></td>
<td>60 Euro</td>
<td>45 Euro / 70 Euro - Triple room 35 Euro</td>
</tr>
<tr>
<td>** Bed &amp; Breakfast</td>
<td>Nettuno **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Via Romagnosi</td>
<td>26 38122 Trento Cell +39 345 8267294 <a href="mailto:Info@bbnettuno.it">Info@bbnettuno.it</a></td>
<td>50 Euro</td>
<td>65 Euro</td>
</tr>
<tr>
<td>** Hotel Garni</td>
<td>Villa Fontana **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Via F.Lli Fontana</td>
<td>11 38122 Trento Tel. +39 0461 829800 Fax +39 0461 829759 <a href="mailto:info@villafontana.it">info@villafontana.it</a></td>
<td>45 Euro</td>
<td>80 Euro</td>
</tr>
<tr>
<td>** Hotel Buonconsiglio</td>
<td>****</td>
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<td></td>
</tr>
<tr>
<td>** Via Romagnosi</td>
<td>14/16 38022 Trento Tel. +39 0461 272888 Fax +39 0461 272889 <a href="mailto:hotelhb@tin.it">hotelhb@tin.it</a></td>
<td>78 Euro</td>
<td>98 Euro / 88 Euro</td>
</tr>
<tr>
<td>** Garni’ Ester</td>
<td>**</td>
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</tr>
<tr>
<td>** Loc. Salè Povo</td>
<td>Tel. +39 0461 810380 Fax. +39 0461 810380 <a href="mailto:camere.ester@gmail.com">camere.ester@gmail.com</a></td>
<td>45 Euro</td>
<td>55 Euro</td>
</tr>
<tr>
<td>** Bed &amp; Breakfast</td>
<td>Le Ziette **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Via Alla Cascata</td>
<td>4/1 Povo 38123 Trento <a href="mailto:le.ziette@virgilio.it">le.ziette@virgilio.it</a></td>
<td>45 Euro</td>
<td>70 Euro</td>
</tr>
<tr>
<td>** Agritur Ponte</td>
<td>Alto **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Via alla Cascata</td>
<td>Povo 38123 Trento Tel. +39 0461 810753 mobile 347 1474234 <a href="mailto:matteo.furlani@libero.it">matteo.furlani@libero.it</a></td>
<td>40 Euro</td>
<td>70 Euro / 40 Euro</td>
</tr>
<tr>
<td>** Adige ****</td>
<td></td>
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</tr>
<tr>
<td>** Via Pomeranos</td>
<td>10 Mattarello 38123 Trento Tel. +39 0461 944545 Fax. +39 0461 944520 <a href="mailto:info@adigehotel.it">info@adigehotel.it</a></td>
<td>69 Euro</td>
<td>69 Euro / 59 Euro</td>
</tr>
<tr>
<td>** Villa Madruzzo</td>
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<tr>
<td>** Loc.Ponte Alto</td>
<td>26 Cognola 38123 Trento Tel. +39 0461 986220 Fax. +39 0461 986361 <a href="mailto:info@villamadruzzo.it">info@villamadruzzo.it</a></td>
<td>65 Euro</td>
<td>95 Euro / 75 Euro</td>
</tr>
</tbody>
</table>

VENUE AND DIRECTIONS

Trento is a town in the North Italy Alpine Region, on the freeway/railway that connects Verona to Innsbruck and Munich. Verona is the nearest airport. It is connected by daily flights with London, Paris, Munich, Rome and many other cities. Milan International Airports are alternative possibilities. Buses connect the Airport of Verona to Trento. Frequent trains connect Milano, Venezia, Bologna to Trento through Verona.
CONTACTS

Technical Issues
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Local Chairs
Nicola Conci conci@disi.unitn.it
Giulia Boato boato@disi.unitn.it

Organizing Secretary
Ufficio Convegni convegni@unitn.it

Association for Computing Machinery
UNIVERSITY OF TRENTO - Italy

Advancing Computing as a Science & Profession

www.acmICMR.org
CALL FOR PAPERS
2011 ACM International Conference on Multimedia Retrieval (ICMR2011)

April 17-20, 2011, Trento (Italy)
http://www.icmr2011.org

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ICMR 2011 is seeking original high quality submissions addressing innovative research in the broad field of multimedia retrieval. We wish to highlight significant contributions addressing the main problem of search and retrieval but also the related and equally important issues of multimedia content management, user interaction, and community-based management. Topics of interest include, but are not limited to:

- Content- and context-based indexing, search and retrieval of images and video
- Multimedia content search and browsing on the Web
- Advanced descriptors and similarity metrics for audio, image, video and 3D data
- Multimedia content analysis and understanding
- Semantic retrieval of visual contents
- Learning and relevance feedback in media retrieval
- Query models, paradigms, and languages for multimedia retrieval
- Multimodal media search
- Human perception based multimedia retrieval
- Studies of information-seeking behaviour among image/video users
- Affective/emotional interaction or interfaces for image/video retrieval
- HCI issues in multimedia retrieval
- Evaluation of multimedia retrieval systems
- High performance multimedia indexing algorithms
- Database architectures for multimedia retrieval
- Novel multimedia data management systems and applications
- Community-based multimedia content management
- Retrieval from multimodal lifelogs
- Interaction with medical image databases
- Satellite imagery analysis/retrieval
- Image/video summarization and visualization

IMPORTANT DATES

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