SIGMM RECORDS

Table of Contents

Association for Computing Machinery

Advancing Computing as a Science & Profession

MPEG Column: 108th MPEG Meeting

– original posts here and here by Multimedia Communication blog and bitmovin techblog, Christian Timmerer, AAU/bitmovin

The 108th MPEG meeting was held at the Palacio de Congresos de Valencia in Spain featuring the following highlights (no worries about the acronyms, this is on purpose and they will be further explained below):

- **Requirements**: PSAF, SCC, CDVA
- **Systems**: M2TS, MPAF, Green Metadata
- **Video**: CDVS, WVC, VCB
- **JCT-VC**: SHVC, SCC
- **JCT-3D**: MV/3D-HEVC, 3D-AVC
- **Audio**: 3D audio

Opening Plenary of the 108th MPEG meeting in Valencia, Spain.

The official MPEG press release can be downloaded from the MPEG Web site. Some of the above highlighted topics will be detailed in the following and, of course, there's an update on DASH-related matters at the end.

As indicated above, MPEG is full of (new) acronyms and in order to become familiar with those, I've put them deliberately in the overview but I will explain them further below.

PSAF – Publish/Subscribe Application Format

Publish/subscribe corresponds to a new network paradigm related to content-centric networking (or information-centric networking) where the content is addressed by its name rather than location. An application format within MPEG typically defines a combination of existing MPEG tools jointly addressing the needs for a given application domain, in this case, the publish/subscribe paradigm. The current requirements and a preliminary working draft are publicly available.

SCC – Screen Content Coding

I've introduced this topic in my previous report and this meeting the responses to the CfP have been evaluated. In total, seven responses have been received which meet all requirements and, thus, the actual standardization work is transferred to JCT-VC. Interestingly, the results of the CfP are publicly available. Within JCT-VC, a first test model has been defined and core experiments have been established. I will report more on this as an output of the next meetings…

CDVA – Compact Descriptors for Video Analysis

This project has been renamed from compact descriptors for video search to compact descriptors for video analysis and comprises a publicly available vision statement. That is, interested parties are welcome to join this new activity within MPEG.

M2TS – MPEG-2 Transport Stream

At this meeting, various extensions to M2TS have been defined such as transport of multi-view video coding depth information and extensions to HEVC, delivery of timeline for external data as well as carriage of layered HEVC, green metadata, and 3D audio. Hence, M2TS is still very active and multiple amendments are developed in parallel.

MPAF – Multimedia Preservation Application Format

The committee draft for MPAF has been approved and, in this context, MPEG-7 is extended with additional description schemes.

Green Metadata

Well, this standard does not have its own acronym; it's simply referred to as MPEG-GREEN. The draft international standard has been approved and national bodies will vote on it at the JTC 1 level. It basically defines metadata to allow clients operating in an energy-

efficient way. It comes along with amendments to M2TS and ISOBMFF that enable the carriage and storage of this metadata.

CDVS – Compact Descriptors for Visual Search

CDVS is at DIS stage and provide improvements on global descriptors as well as non-normative improvements of key-point detection and matching in terms of speedup and memory consumption. As all standards at DIS stage, national bodies will vote on it at the JTC 1 level.

What's new in the video/audio-coding domain?

- **WVC – Web Video Coding**: This project reached final draft international standard with the goal to provide a video-coding standard for Web applications. It basically defines a profile of the MPEG-AVC standard including those tools not encumbered by patents.
- **VCB – Video Coding for Browsers**: The committee draft for part 31 of MPEG-4 defines video coding for browsers and basically defines VP8 as an international standard. This is explains also the difference to WVC.
- **SHVC – Scalable HEVC extensions**: As for SVC, SHVC will be defined as an amendment to HEVC providing the same functionality as SVC, scalable video coding functionality.
- **MV/3D-HEVC, 3D-AVC**: These are multi-view and 3D extensions for the HEVC and AVC standards respectively.
- **3D Audio**: Also, no acronym for this standard although I would prefer 3DA. However, CD has been approved at this meeting and the plan is to have DIS at the next meeting. At the same time, the carriage and storage of 3DA is being defined in M2TS and ISOBMFF respectively.

Finally, what's new in the media transport area, specifically **DASH and MMT**?

As interested readers know from my previous reports, DASH 2nd edition has been approved has been approved some time ago. In the meantime, a first amendment to the 2nd edition is at draft amendment state including additional profiles (mainly adding xlink support) and time synchronization. A second amendment goes to the first ballot stage referred to as proposed draft amendment and defines spatial relationship description, generalized URL parameters, and other extensions. Eventually, these two amendments will be integrated in the 2nd edition which will become the MPEG-DASH 3rd edition. Also a corrigenda on the 2nd edition is currently under ballot and new contributions are still coming in, i.e., there is still a lot of interest in DASH. For your information – there will be two DASH-related sessions at Streaming Forum 2014.

On the other hand, MMT's amendment 1 is currently under ballot and amendment 2 defines header compression and cross-layer interface. The latter has been progressed to a study document which will be further discussed at the next meeting. Interestingly, there will be a MMT developer's day at the 109th MPEG meeting as in Japan, 4K/8K UHDTV services will be launched based on MMT specifications and in Korea and China, implementation of MMT is now under way. The developer's day will be on July 5th (Saturday), 2014, 10:00 – 17:00 at the Sapporo Convention Center. Therefore, if you don't know anything about MMT, the developer's day is certainly a place to be.

Contact:

Dr. Christian Timmerer
CIO bitmovin GmbH | christian.timmerer@bitmovin.net
Alpen-Adria-Universität Klagenfurt | christian.timmerer@aau.at

What else? That is, some publicly available MPEG output documents… (Dates indicate availability and end of editing period, if applicable, using the following format YY/MM/DD):

- Text of ISO/IEC 13818-1:2013 PDAM 7 Carriage of Layered HEVC (14/05/02)
- WD of ISO/IEC 13818-1:2013 AMD Carriage of Green Metadata (14/04/04)
- WD of ISO/IEC 13818-1:2013 AMD Carriage of 3D Audio (14/04/04)
- WD of ISO/IEC 13818-1:2013 AMD Carriage of additional audio profiles & levels (14/04/04)
- Text of ISO/IEC 14496-12:2012 PDAM 4 Enhanced audio support (14/04/04)
- TuC on sample variants, signatures and other improvements for the ISOBMFF (14/04/04)
- Text of ISO/IEC CD 14496-22 3rd edition (14/04/04)
- Text of ISO/IEC CD 14496-31 Video Coding for Browsers (14/04/11)
- Text of ISO/IEC 15938-5:2005 PDAM 5 Multiple text encodings, extended classification metadata (14/04/04)
- WD 2 of ISO/IEC 15938-6:201X (2nd edition) (14/05/09)
- Text of ISO/IEC DIS 15938-13 Compact Descriptors for Visual Search (14/04/18)
- Test Model 10: Compact Descriptors for Visual Search (14/05/02)
- WD of ARAF 2nd Edition (14/04/18)
- Use cases for ARAF 2nd Edition (14/04/18)

- WD 5.0 MAR Reference Model (14/04/18)
- Logistic information for the 5th JAhG MAR meeting (14/04/04)
- Text of ISO/IEC CD 23000-15 Multimedia Preservation Application Format (14/04/18)
- WD of Implementation Guideline of MP-AF (14/04/04)
- Requirements for Publish/Subscribe Application Format (PSAF) (14/04/04)
- Preliminary WD of Publish/Subscribe Application Format (14/04/04)
- WD2 of ISO/IEC 23001-4:201X/Amd.1 Parser Instantiation from BSD (14/04/11)
- Text of ISO/IEC 23001-8:2013/DCOR1 (14/04/18)
- Text of ISO/IEC DIS 23001-11 Green Metadata (14/04/25)
- Study Text of ISO/IEC 23002-4:201x/DAM2 FU and FN descriptions for HEVC (14/04/04)
- Text of ISO/IEC 23003-4 CD, Dynamic Range Control (14/04/11)
- MMT Developers' Day in 109th MPEG meeting (14/04/04)
- Results of CfP on Screen Content Coding Tools for HEVC (14/04/30)
- Study Text of ISO/IEC 23008-2:2013/DAM3 HEVC Scalable Extensions (14/06/06)
- HEVC RExt Test Model 7 (14/06/06)
- Scalable HEVC (SHVC) Test Model 6 (SHM 6) (14/06/06)
- Report on HEVC compression performance verification testing (14/04/25)
- HEVC Screen Content Coding Test Model 1 (SCM 1) (14/04/25)
- Study Text of ISO/IEC 23008-2:2013/PDAM4 3D Video Extensions (14/05/15)
- Test Model 8 of 3D-HEVC and MV-HEVC (14/05/15)
- Text of ISO/IEC 23008-3/CD, 3D audio (14/04/11)
- Listening Test Logistics for 3D Audio Phase 2 (14/04/04)
- Active Downmix Control (14/04/04)
- Text of ISO/IEC PDTR 23008-13 Implementation Guidelines for MPEG Media Transport (14/05/02)
- Text of ISO/IEC 23009-1 2nd edition DAM 1 Extended Profiles and availability time synchronization (14/04/18)
- Text of ISO/IEC 23009-1 2nd edition PDAM 2 Spatial Relationship Description, Generalized URL parameters and other extensions (14/04/18)
- Text of ISO/IEC PDTR 23009-3 2nd edition DASH Implementation Guidelines (14/04/18)
- MPEG vision for Compact Descriptors for Video Analysis (CDVA) (14/04/04)

- Plan of FTV Seminar at 109th MPEG Meeting (14/04/04)
- Draft Requirements and Explorations for HDR /WCG Content Distribution and Storage (14/04/04)
- Working Draft 2 of Internet Video Coding (IVC) (14/04/18)
- Internet Video Coding Test Model (ITM) v 9.0 (14/04/18)
- Uniform Timeline Alignment (14/04/18)
- Plan of Seminar on Hybrid Delivery at the 110th MPEG Meeting (14/04/04)
- WD 2 of MPEG User Description (14/04/04)

Call for Nominations for the SIGMM Rising Star Award 2014

AWARD DESCRIPTION

Starting 2014, ACM SIGMM will present a "Rising Star" Award annualy, recognizing a young researcher – an individual either no older than 35 or within 7 years of PhD – who has made outstanding research contributions to the field of multimedia computing, communication and applications during this early part of his or her career. Depth, impact, and novelty of the researcher's contributions will be key criteria upon which the Rising Star award committee will evaluate the nominees. Also of particular interest are strong research contributions made independently from the nominee's PhD advisor.

The award includes a $1000 honorarium, an award certificate of recognition, and an invitation for the recipient to present a keynote talk at a current year's SIGMM-sponsored conference, the ACM International Conference on Multimedia (ACM Multimedia). Travel expenses to the conference will be covered by SIGMM, and a public citation for the award will be placed on the SIGMM website.

FUNDING

The award honorarium, the award certificate of recognition and travel expenses to the ACM International Conference on Multimedia is fully sponsored by the SIGMM budget.

NOMINATION PROCESS

Nominations are solicited by June 15, 2014 with decision made by July 30 2014, in time to allow the above recognition and award presentation at ACM Multimedia 2014.

The nomination rules are:

A nominee must be either 35 years of age or younger as of December 31 of the year in which the award would be made, or at most 7 years have passed since his/her PhD degree as of December 31 of the year in which the award would be made.

Material to be included in the nomination:

1. Curriculum Vitae, including publications, of nominee.

2. A letter from the nominator (maximum two pages) documenting the nominee's research accomplishments as well as justifying the nomination, the significance of the work, and the nominee's role in the work.

3. A maximum of 3 endorsement letters of recommendation from others which identify the rationale for the nomination and by what means the recommender knows of the nominee's work.

4. A concise statement (one sentence) of the achievement(s) for which the award is being given. This statement will appear on the award certificate and on the website.

- The nominee can be any member of the scientific community.
- The nominator must be a SIGMM member.
- No self-nomination is allowed.
- Nominations that do not result in an award will remain in consideration for up to two years if the candidate still meets the criteria with regard to age or PhD award(i.e. no older than 35 or within 7 years of PhD). Afterwards, a new nomination must be submitted.
- The SIGMM elected officers as well as members of the Awards Selection Committee are not eligible.

Please submit your nomination to the award committee by email.

SIGMM Rising Star Award Committee (2014)

- Rainer Lienhart (rainer.lienhart@informatik.uni-augsburg.de (`<rainer.lienhart@informatik.uni-augsburg.de>`)) (CHAIR)
- Dick Bulterman (Dick.Bulterman@fxpal.com (`<Dick.Bulterman@fxpal.com>`))
- Hong-Jiang Zhang (hongjiangz@kingsoft.com (`<hongjiangz@kingsoft.com>`))
- Nicu Sebe (nicusebe@gmail.com (`<nicusebe@gmail.com>`))
- Shih-Fu Chang (shih.fu.chang@columbia.edu (`<shih.fu.chang@columbia.edu>`))

- Klara Nahrstedt (klara@illinois.edu (`<klara@illinois.edu>`))

Errata: SIGMM Records March 2014

In the March 2014 issue of the SIGMM Records, a mistake happened in the article "Most cited papers before the era of ICMR". On the list of most-cited papers from CIVR 2009, a paper with a similar title was listed in fourth place instead of the correct CIVR paper. The title of the paper holding fourth place should be:

- **Dense sampling and fast encoding for 3D model retrieval using bag-of-visual features**
  Takahiko Furuya, Ryutarou Ohbuchi
  http://dl.acm.org/citation.cfm?id=1646430

This mistake has been corrected in the online version of the SIGMM Records, accessible at http://records.sigmm.ndlab.net/records-issues/acm-sigmm-records-march-2014/, but it remains in the archived PDF version of the Records.

ACM TOMCCAP becomes ACM TOMM

On 23rd May 2014, **ACM TOMCCAP becomes ACM TOMM**.

This acronym change is the result of a discussion within the journal's Editorial Board, within SIGMM and between the ACM SIGMM Executive Committee and the Editorial Board. It is a process which started already in the year 2011.

Two reasons have led to the final decision: 1.) Many scientists, authors and readers have been telling us that the acronym "TOMCCAP" is somehow strange; it does not imply the journal's focus on Multimedia research, it is too long and complicated; it sounds too specialized for a leading journal which highlights all aspects of Multimedia research. 2.) With this name change we want to emphasize the strong and long lasting collaboration with the ACM Multimedia conference (ACM MM) which we plan to further increase in the future.

New book: Multimedia Computing

URL: http://www.sigmm.org/Education

(The following information about the book is taken from Cambridge University Press)

SIGMM Education Column of this issue highlights an upcoming text book, titled "Multimedia Computing," which presents emerging techniques in multimedia computing from an experiential perspective in which each medium – audio, images, text, and so on – is a strong component of the complete, integrated exchange of information or experience. The book is authored by Dr. Gerald Friedland of International Computer Science Institute, Berkeley, California, USA and Prof. Ramesh Jain of University of California, Irvine, USA, and it is published by Cambridge University Press.

The goal of this book is to present current techniques in computing and communication that will lead to the development of a unified and holistic approach to computing using heterogeneous data sources.

The authors introduce the fundamentals of multimedia computing, describing the properties of perceptually encoded information, presenting common algorithms and concepts for handling it, and outlining the typical requirements for emerging applications that use multifarious information sources. Designed for advanced undergraduate and beginning graduate courses, the book will also serve as an introduction for engineers and researchers interested in understanding the elements of multimedia and their role in building specific applications.

More details about this book can be found on:

http://www.cambridge.org/ca/academic/subjects/computer-science/computer-graphics-image-processing-and-robotics/multimedia-computing?format=HB.

ImproveMyCity – An open source platform for direct citizen-government communication

Motivation & Overview

In modern societies there is a growing requirement for public administrations to directly communicate with their citizens, view the existing problems from their perspective and re-act to their needs. In meeting this requirement, modern technologies have become a particularly valuable instrument that, apart from being a rich source of information, is also an integral part of our daily activities. Web and mobile civic engagement apps are able to transform citizens into the living sensors of their city and, in this way, help them to actively participate in the improvement of their neighborhood.

Fulfilling this goal, **ImproveMyCity** is a platform that, on the one hand, enables citizens to directly report issues about their neighborhood (e.g. potholes, illegal trash dumping, faulty street lights, broken tiles on sidewalks, and illegal advertising boards), and, on the other hand, provides the necessary back-end infrastructure and interfaces for public servants to keep track of the reported issues, schedule their settlement and provide feedback to the citizen about the progress status. The reported cases go directly into the city's work order queue for resolution, and users are informed how quickly the case will be closed. When cases are resolved the date and time of the resolution is listed, providing users with the sense that the city is on the job. In this way, **ImproveMyCity** helps Municipalities to enlist new segments of the population —people who had not previously participated in government—and bring their concerns, insight, energy, and commitment to reinvigorate not only the city but also the government.

Video 1: Core concept of ImproveMyCity.

The ImproveMyCity platform is structured as a client-server application and is implemented as an extension of the Joomla framework. The platform consists of a web- based portal for allowing citizens to report issues from their desktop PC, a smartphone application for android devices that allows citizens to do the same process through their mobile phone and a back-end

infrastructure for allowing the governmental agencies to easily handle the reported issues. The source code is available in GitHub both for the web-based front-end and the back-end infrastructure, as well as for the mobile front-end. All source codes are provided with detailed user guides explaining how to download and install the applications and are licensed under the under the GNU Affero General Public License. The web-based front-end and back-end infrastructure are also available through the official Joomla Extension Directory (JED).

Service model & Key features

The service model of **ImproveMyCity** is based on three main pillars: **Report** – **Administer** – **Analyze**. City residents are urged to directly **report** to their public administration local issues about their neighborhood. Subsequently, the reported issues are automatically transmitted to the appropriate office in public administration so as to schedule their settlement. The **administration** (i.e. management and routing) of incoming issues is performed through a back-end infrastructure that serves as an integrated management system, allowing the governmental agencies to easily handle the reported issues. Finally, data **analysis** is performed through a visual analytics tool that employs heatmap-based visualizations and spatio-temporal filters with the aim to offer decision makers valuable insights for improving the city operation. The key features can be summarized as follows:

Report - Citizens requests, complaints & suggestions

- *Submitted via web or mobile:* By allowing citizens to report issues from their home using the web version, or while on the street using the mobile app (iOS &Android)
- *Easily composed but descriptive:* By asking citizens to provide only the information necessary to locate and resolve the issue, such as title, description, location and category.
- *Accurately positioned:* By offering a map to facilitate citizens in determining the exact location of their issue.
- *Picture enabled:* By allowing to attach an image on the spot for describing the issue.
- *Categorized based on their nature:* By urging citizens to select one of the pre-specified categories reflecting the municipality departments.
- *Commented and voted:* By offering the mechanisms to post comments or vote for issues that have been submitted by other citizens.

Administer - Citizens issues through an integrated management system

- *Browse effectively:* Issues are presented on the city map, as an ordered list but also in a single-issue page displaying the full set of submitted details.
- *Distribute responsibilities:* Assign one or more officers per category and split the administration effort across the municipality departments.
- *Track pending issues:* Issues are automatically routed not only to the appropriate department but also to the inbox of the responsible officer.
- *Monitor progress and update citizens:* Resolve issues and inform citizens by email or through a progress indication bar (Open->Acknowledged->Closed).
- *Provide direct feedback:* Provide written feedback to the citizens giving non-standard explanations for each specific case.
- *Customize easily:* Fully customize the system in terms of user rights, number and nature of categories, notification rules and localization settings.

Analyse - Citizens data to gain city insights

- *Filter and explore:* Combine temporal filters with free keyword-based search and dynamically explore citizens' data through interactive visualizations.
- *Aggregate and visualize:* Aggregate data based on their spatial density or statistical frequency and visualize them using heatmaps, tag-clouds, color codes and pie charts.
- *Discover hidden patterns:* Observe spatio-temporal tendencies, unexpected periodicities, significant outliers, popular issues and prevailing terms.
- *Translate patterns into insights:* Identify areas with dissatisfied citizens, under-performing departments due to heavy workload, seasonal burden on city infrastructures, etc.

Interface & Installation

The ImproveMyCity platform consists of four main interaction components: a) The web-based front-end for reporting issues through a desktop PC, b) The smartphone-based front-end for reporting issues through a mobile phone, c) the back-end infrastructure and related interfaces for administering the incoming

issues, and d) the analyics component for visualizing the reported issues in an interactive manner.
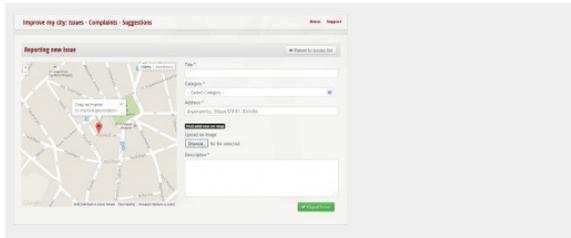

Figure 2: Web-based front-end for issue reporting.

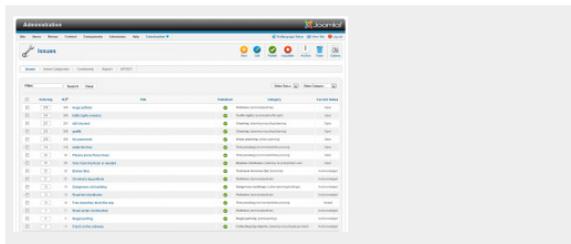Figure 3: Mobile apps for issue reporting.

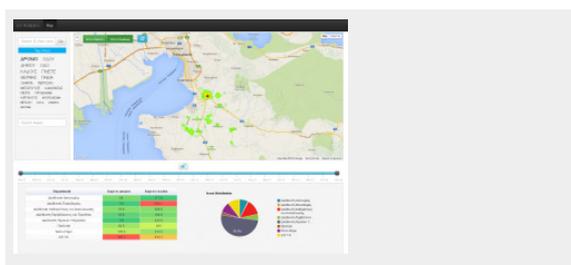Figure 4: Integrated system for managing incoming issues.

Figure 5: Visual analytics for dynamic data exploration.

Since the web-based front-end and the back-end infrastructure and interfaces are developed as standard Joomla components, their installation and running is a plain process. Indeed after a few simple steps the ImproveMyCity back-end infrastructure and the web-based front-end are ready to be used and administered. Similarly, the mobile front-end requires a few extra steps, so as to connect with the server and get synchronized with the web-based front-end. Moreover,

due to its nature, ImproveMyCity has been specifically designed to make fully customizable all parameters needed to localize the platform for a certain city. In this respect all language-related menus, geo-positioning related parameters and layout options, are accessible through external files that can be easily edited. Moreover, particular attention has been placed on language-based localization by initiating and maintaining a crowdsourcing project in Transifex.

User-centered design

ImproveMyCity has been developed in close cooperation with the end-users in a co-design process with successive innovation cycles. More specifically, particular attention has been paid in engaging the end-users during the functional and aesthetic design of the application. After identifying the end-user groups (i.e. city stakeholders, citizens, service providers and city visitors), the development team of ImproveMyCity has followed a systematic approach for bringing these groups into the application design loop, including: a) Users' briefing through informative events focused on specific topics / user groups – including their follow-ups, informative media (demos / videos / newsletters / posters / text messages / forums) to communicate information to users, b) Gathering user's feedback, by asking users to provide information about their opinion or specific ideas or initiatives, as part of the application optimization process, c) Lead users' engagement in testing, which encouraged the involvement of users in planning specific actions and influencing decisions. This included one-off, specifically focused events, working groups, focus groups, workshops, questionnaires and interviews.

In implementing the aforementioned approach the team of ImproveMyCity has developed a number of early demos that were communicated to the end-users (together with a survey questionnaire) through the official portal of the Municipality. Subsequently, the end users were asked to get familiarized with the version.0 of the application, interact with the demos and complete the questionnaire. At the end of the procedure, all end user groups were familiarized with the demos and they were able to proceed to the evaluation of the applications via the questionnaire. At this point, the development team of ImproveMyCity, taking into consideration the results of the questionnaire, the observations and remarks from lead users and their own experience and opinion; proceeded to the addition of new features and improved the functionality of the initial version, leading to version.1 of the application. This marked the completion of the first innovation cycle. Successive innovation cycles continued to take place as initially designed, until the ImproveMyCity platform reached its final form.
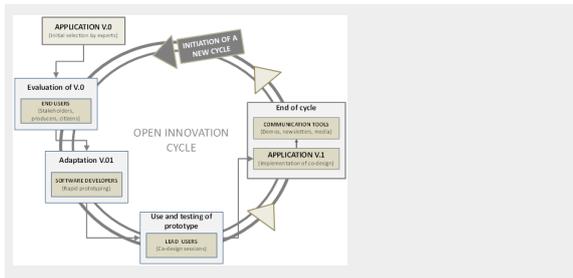
Figure 1: User involvement strategy for successive open innovation cycles.

Showcase

A demo installation of ImproveMyCity has been setup to lively demonstrate the features of the application. You can navigate through a set of fictionary issues in order to get in touch with the application workflow and functionality. See the application running, submit issues through the Android or the iPhone App and watch them appear in the demo installation.
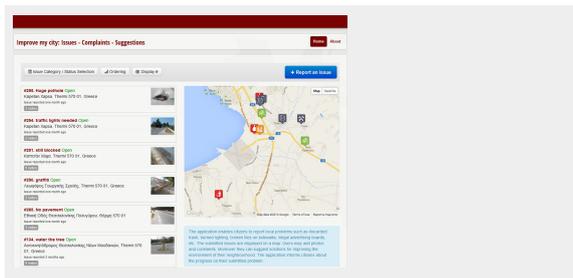

Figure 5: Demo installation.

Highlights & Future Plans

The ImproveMyCity platform was originally deployed in the Municipality of Thermi, Greece in April 2012. One year later more than 500 users were registered, generating more than 585 issues and 1350 comments. Since its official release as an open source software, ImproveMyCity has been viewed more than 15000 times and downloaded more than 3800 times. Based on our current records (June 2014) there are more than 35 intallations (active & pilot) around the globe. Although the idea of engaging citizens into a two-way dialogue with their administration for improving their urban space has been around for some time, e.g. FixMyStreet, SeeClickFix, BuitenBeter, ImproveMyCity is the first integrated solution that is made available as open source and covers the full-chain of information flow, ranging from the desktop user that reports issues from the leisure of his home and the mobile citizen that reports issues while on the move, all the way to the back-end management system for administering the incoming issues and the reports with aggregated statistics for performance assessment and future planning of resources.

Moreover, characterized by its simple installation process, its extensive customization options and its minimum requirements in terms of additional hardware or external software libraries, ImproveMyCity is ideal for municipalities that don't want to invest many resources until they are convinced about the benefits of citizen-government collaboration for urban maintenance and improvement. Our future plans include the extension of the existing back-end infrastructure for administering the incoming issues, with a sophisticated ticketing system that will allow for dynamic responsibility allocation and close progress monitoring. On the mobile side, our next step will be towards becoming more integrated with social media by allowing users to login with their social accounts and share their ImproveMyCity-related activity with their friends.

References

I. Tsampoulatidis, D. Ververidis, P. Tsarchopoulos, S. Nikolopoulos, I. Kompatsiaris and N. Komninos, ImproveMyCity – An open source platform for direct citizen-government communication, The 21st ACM International Conference on Multimedia – Open Source Software Competition, Barcelona, Catalunya, Spain, October 21-25, 2013

Call for Bids: ACM Multimedia 2017

Required Bid Documents

Two documents are required:

1. **Bid Proposal**: This document outlines all of the details except the budget. The proposal should contain:

   a. **The organizing team**: Names and brief bios of General Chairs, Program Chairs and Local Arrangements Chairs. Names and brief bios of at least one chair (out of the two) each for Workshops, Panels, Video, Brave New Ideas, Interactive Arts, Open Source Software Competition, Multimedia Grand Challenge, Tutorials, Doctoral Symposium, Preservation and Technical Demos. It is the responsibility of the General Chairs to obtain consent of all of the proposed team members. Please note that

the SIGMM Executive Committee may suggest changes in the team composition for the winning bids. Please make sure that everyone who has been initially contacted understands this.

b. **The Venue for the conference/workshops**: The details of the proposed conference venue including the location, layout and facilities. The layout should facilitate maximum interaction between the participants. It should provide for the normal required facilities for multimedia presentations including internet access. Please note that the 2017 ACM Multimedia Conference will be held in North/South America.

c. **The Venue for the art exhibition**: This facility must be an actual building/facility that can house installation exhibits. Art galleries and science museums have been used successfully in the past. The bid should include considerations for transportation from the conference to the gallery at least for the night of the art opening; this requires either selecting a facility within walking distance to the Venue, or providing shuttle buses.

d. **Accommodation**: the bids should indicate a range of accommodations, catering for student, academic and industry attendees with easy as well as quick access to the conference venue. Indicative costs should be provided. Indicative figures for lunches/dinners and local transport costs for the location must be provided.

e. **Accessibility**: The venue should be easily accessible to participants from Americas, Europe and Asia (the primary sources of attendees). Indicative cost of travel from these major destinations should be provided.

f. **Other aspects**:

   i. commitments from the local government and organizations

   ii. committed financial and in-kind sponsorships

   iii. institutional support for local arrangement chairs

   iv. conference date in September/October/November which does not clash with any major holidays or other major related conferences

   v. social events to be held with the conference

   vi. possible venue(s) for the TPC Meeting. This should preferable be held in conjunction with ICMR 2017 in June/July.

   vii. any innovations to be brought into the conference

   viii. cultural/scenic/industrial attractions

2. Tentative Budget: The entire cost of holding the conference with realistic estimated figures should be provided. This template budget sheet should be used for this purpose: http://disi.unitn.it/~sebe/ACMMM_Budget_Template.xlsPlease note that the sheet is quite detailed and you may not have all of the information. Please try to fill it as much as possible. All committed sponsorships for conference organization, meals, student subsidy and awards must be highlighted. The estimated registration costs for ACM members, non-members and students will be required for preparing the budget. Estimates of the number of attendees will also be required.

As example files from the past winning proposal you can have a look at Orlando 2014 and Amsterdam 2016 bid files.

Feedback from ACM Multimedia Steering Committee:

The bid documents will also be submitted to the ACM Multimedia Steering Committee. The feedback of this committee will have to be incorporated in the final submission of the proposal.

Bid Evaluation Procedure:

Bids will be evaluated on the basis of:

1. Quality of the Organizing Team (both technical strengths and conference organization experience)

2. Quality of the Venue (facilities and accessibility)

3. Affordability of the Venue (travel, stay and registration)to the participants

4. Viability of the Budget: Since SIGMM fully sponsors this conference and it does not have reserves, the aim is to minimize the probability of making a loss and maximize the chances of making a small surplus.

The winning bid will be decided by the SIGMM Executive Committee by vote.

Bid Submission Procedure:

Please up-load the two required documents and any other supplementary material to a web-site. The general chairs then should email the formal intent to host along with the bid documents web-site URL to the SIGMM Chair (sfchang@ee.columbia.edu) and the Director of Conferences (sebe@disi.unitn.it) by Sep 01, 2014.

Time-line:

Sep 01, 2014:	Bid URL to be submitted to SIGMM Chair and Director of Conferences
Sep 2014:	Bids open for viewing by SIGMM Executive Committee and ACM Multimedia Steering Committee
Oct 01, 2014:	Feedback from SIGMM Executive Committee and ACM Multimedia Steering Committee made available
Oct 15, 2014:	Bid Documents to be finalized
Oct 15, 2014:	Bids open for viewing by all SIGMM Members
Nov 5, 2014:	10-min Presentation of each Bid at ACM Multimedia 2014
Nov 6, 2014:	Decision by the SIGMM Executive Committee

Please note that there is a separate conference organization procedure which kicks in for the winning bids whose details can be seen at: http://www.acm.org/sigs/volunteer_resources/conference_manual

PhD Thesis Summaries

Chidansh Amitkumar Bhatt

Probabilistic temporal multimedia datamining

Supervisor(s) and Committee member(s): Mohan S. Kankanhalli (supervisor)
URL: http://scholarbank.nus.edu.sg/handle/10635/33316

Advances in data acquisition and storage technology have led to the growth of very large multimedia databases. Analyzing this huge amount of multimedia data to discover useful knowledge is a challenging problem. This challenge has opened the opportunity for research in Multimedia Data Mining (MDM), the process of finding interesting patterns from media data such as audio, video, image and text that are not ordinarily accessible by basic queries and associated results. The motivation of doing MDM is to use the discovered patterns to improve decision making. MDM has therefore attracted significant research efforts in developing methods and tools to organize, manage, search and perform specific tasks for data from domains such as surveillance, meetings, broadcast television, sports, archives, movies, medical data, as well as personal and online media collections.

Existing MDM methods consider either low-level content features (e.g., color, texture etc.) or high-level text meta-data features (e.g., object, action etc.) for mining purposes. While the low-level features describe the actual content of the signal data they are unable to provide high level semantics of the mined data. Such, high level semantics are essential for applications like behavior analysis, semantic similarity etc. On the other hand, high-level text meta-data (e.g., tags, comments etc.) are capable of providing semantic interpretation for mining but they are noisy and require manual effort. However, existing MDM techniques assume that the automatically obtained labels (e.g., concepts, events etc.) from detectors are accurate. However, in reality detectors label the events/concepts from different modalities with a certain confidence measure over a time-interval. Therefore, it is important to consider the uncertainties associated with the detected concepts over time in the process of multimedia data mining.

This thesis proposes a framework for multimedia data mining which leverages on the probabilistic, temporal and multimodal characteristics of multimedia data. The proposed Probabilistic Temporal Multimodal (PTM) data mining framework for multimedia applications effectively handles issues like incorporating semantic knowledge, data sparsity in semantic representation of multimedia data, inaccuracy of binary concept detectors, dynamic temporal correlation etc. The utility of the proposed framework is demonstrated in the following three multimedia applications,

- Frequent event patterns for group meeting behavior analysis.
- Concept-based near-duplicate video clip clustering for novelty re-ranking of web video search results.
- Adaptive ontology rule based classification for composite concept detection.

Towards the end of the thesis, we present our conclusions and future research directions.

Multimedia Analysis and Synthesis Lab
URL: http://mmas.comp.nus.edu.sg/

Our research philosophy is to do problem-driven research in multimedia systems which explore the development of novel algorithms and techniques. There are two main themes of our research work: content-based multimedia information processing and multimedia information security. Both are systems research areas which have fundamental conceptual issues arising out of real-world problems. So their flavor is a blend of both basic and applied research.

The long-term goal of this research program is to develop fundamental techniques, algorithms and applications which can allow multimedia data to be utilized with as much ease as text data can be on today's computers. The medium-term aim of this research is to develop techniques for semantic content-based processing of image, video and audio, to provide intuitive access and retrieval to image, video and audio information, and to provide tools for processing, analyzing & synthesizing images, video and audio. In the short term, this research will have a major impact on many areas such as consumer electronics, web-based services, social media, video surveillance and media security & privacy. The long-term impact will be on the advancement of the state of understanding of sensory information processing.

Recently published

MMSJ Volume 20, Issue 3

Editor-in-Chief: Thomas Plagemann
URL: http://link.springer.com/journal/530/20/3/page/1
Published: June 2014

- **Chunyuan Li, A. Ben Hamza**: Spatially aggregating spectral descriptors for nonrigid 3D shape retrieval: a comparative survey
- **Mohammad Kazemi, Shervin Shirmohammadi, Khosrow Haj Sadeghi**: A review of multiple description coding techniques for error-resilient video delivery
- **Noreen Imran, Boon-Chong Seet, A. C. M. Fong**: A semi-oblivious energy-aware adaptive watermarking for wireless image sensor networks
- **Suchul Shin, Byounghyun Yoo, Soonhung Han**: A framework for automatic creation of motion effects from theatrical motion pictures

MMSJ Volume 20, Issue 4

Editor-in-Chief: Thomas Plagemann
URL: http://link.springer.com/journal/530/20/4/page/1
Published: July 2014

- **Bailan Feng, Zhineng Chen, Rong Zheng, Bo Xu**: Multiple style exploration for story unit segmentation of broadcast news video
- **Kan Chang, Tuanfa Qin, Wenbo Xu, Zhenhua Tang**: Reconstruction of multi-view compressed imaging using weighted total variation
- **Xianhua Song, Shen Wang, Ahmed A. Abd El-Latif, Xiamu Niu**: Dynamic watermarking scheme for quantum images based on Hadamard transform
- **Turgay Yilmaz, Adnan Yazici, Masaru Kitsuregawa**: RELIEF-MM: effective modality weighting for multimedia information retrieval
- **Reza Rejaie, Nazanin Magharei**: On performance evaluation of swarm-based live peer-to-peer streaming applications
- **Cencen Zhong, Zhenjiang Miao**: Graph regularized GM-pLSA and its applications to video content analysis

MMTC R-Letter Volume 5, Issue 3

Board Director: Irene Cheng
Board Co-Directors: Weiyi Zhang and Christian Timmerer
URL: http://committees.comsoc.org/mmc/r-letters/MMTC-RLetter-Jun2014.pdf
Published: June 2014

The objectives of the IEEE MMTC R-Letter are:

- Stimulate research on multimedia communication.
- Encourage researchers to submit papers (R-Letter CFP) to IEEE MMTC sponsored publications and conferences.
- Nominate papers published in IEEE MMTC sponsored publications/conferences for best paper awards.

- Message from the Review Board
- A Framework for Compressive Sensing based on Secure Watermark Detection and Privacy Preserving Storage
  - A short review for "A Compressive Sensing based Secure Watermark Detection and Privacy Preserving Storage Framework"
  - Edited by Koichi Adachi
- Evaluation of Image Retargeting: From Single to Multi-operator

- A short review for "Objective Quality Assessment for Image Retargeting Based on Structural Similarity"
  - Edited by Irene Cheng
- Quality of Experience Assessment using Crowdsourcing
  - A short review for "Best Practices for QoE Crowdtesting: QoE Assessment with Crowdsourcing"
  - Edited by Tobias Hoßfeld and Christian Timmerer
- Alternative state-based approach to video communication for streaming applications
  - A short review for "Informative State-Based Video Communication"
  - Edited by Weiyi Zhang
- Constructing Structured Dictionaries using Graphs
  - A short review for "Parametric Dictionary Learning for Graph Signals"
  - Edited by Gene Cheung
- Face Hallucination by Exploring Image Structures
  - A short review for "Structured Face Hallucination"
  - Edited by Hao Hu
- Estimating Important Factors in Multi-frame Super Resolution
  - A short review for "On Bayesian adaptive video super resolution"
  - Edited by Jun Zhou
- Coding of Free-Viewpoint Video in Error-prone Channels
  - A short review for "Loss-Resilient Coding of Texture and Depth for Free-Viewpoint Video Conferencing"
  - Edited by Carl James Debono
- Paper Nomination Policy
- MMTC R-Letter Editorial Board
- Multimedia Communications Technical Committee (MMTC) Officers

MTAP Volume 70, Issue 1

- **Vasileios Mezaris, Ansgar Scherp, Ramesh Jain…**: Real-life events in multimedia: detection, representation, retrieval, and applications
- **Ansgar Scherp, Vasileios Mezaris**: Survey on modeling and indexing events in multimedia
- **Minh-Son Dao, Duc-Tien Dang-Nguyen…**: Robust event discovery from photo collections using Signature Image Bases (SIBs)
- **Massimiliano Ruocco, Heri Ramampiaro**: A scalable algorithm for extraction and clustering of event-related pictures
- **Christos Zigkolis, Symeon Papadopoulos…**: Collaborative event annotation in tagged photo collections

- **Francesco Cricri, Kostadin Dabov, Igor D. D. Curcio…**: Multimodal extraction of events and of information about the recording activity in user generated videos
- **Gert-Jan Poulisse, Yorgos Patsis, Marie-Francine Moens**: Unsupervised scene detection and commentator building using multi-modal chains
- **Hong Cheng, Zicheng Liu, Yang Zhao, Guo Ye…**: Real world activity summary for senior home monitoring
- **Concetto Spampinato, Simone Palazzo, Bastian Boom…**: Understanding fish behavior during typhoon events in real-life underwater environments
- **Ashit Talukder, Anand Panangadan**: Extreme event detection and assimilation from multimedia sources
- **Cristina Emilia Costa**: User centric media research challenges
- **Raffaele Bolla, Riccardo Rapuzzi, Matteo Repetto**: User-centric mobility management for multimedia content access
- **Theodore Zahariadis, Federico Alvarez…**: An architectural approach towards Future Media Internet
- **Jose Oscar Fajardo, Ianire Taboada, Fidel Liberal**: QoE-driven and network-aware adaptation capabilities in mobile multimedia applications
- **Gokce Nur, Hemantha Kodikara Arachchi, Safak Dogan…**: Modeling user perception of 3D video based on ambient illumination context for enhanced user centric media access and consumption
- **Georgios Vouzounaras, Petros Daras…**: Automatic generation of 3D outdoor and indoor building scenes from a single image
- **Thangam Vedagiri Seenivasan, Mark Claypool**: CStream: neighborhood bandwidth aggregation for better video streaming
- **Concetto Spampinato, Bastiaan J. Boom, Jiyin He**: MTAP special issue on methods and tools for ground truth collection in multimedia applications
- **Isaak Kavasidis, Simone Palazzo, Roberto Di Salvo…**: An innovative web-based collaborative platform for video annotation
- **André Lourenço, Hugo Plácido da Silva…**: A web-based platform for biosignal visualization and annotation
- **Jose M. Mossi, Antonio Albiol, Alberto Albiol…**: Ground truth annotation of traffic video data
- **Xavier Giró-i-Nieto, Manuel Martos, Eva Mohedano…**: From global image annotation to interactive object segmentation
- **Meltem Demirkus, James J. Clark, Tal Arbel**: Robust semi-automatic head pose labeling for real-world face video sequences
- **Xueliang Liu, Benoit Huet**: On the automatic online collection of training data for visual event modeling
- **A. Porebski, N. Vandenbroucke, L. Macaire, D. Hamad**: A new benchmark image test suite for evaluating colour texture classification schemes
- **Cesar Isaza, Joaquin Salas, Bogdan Raducanu**: Rendering ground truth data sets to detect shadows cast by static objects in outdoors

- **J. van Rest, F. A. Grootjen, M. Grootjen, R. Wijn…**: Requirements for multimedia metadata schemes in surveillance applications for security

MTAP Volume 70, Issue 2

- **Shuqiang Jiang, Changsheng Xu, Yong Rui…**: Preface: Internet multimedia computing and service
- **Yanyun Qu, Shaojie Wu, Han Liu, Yi Xie, Hanzi Wang**: Evaluation of local features and classifiers in BOW model for image classification
- **Sheng-hua Zhong, Yan Liu, Yang Liu, Fu-lai Chung**: Region level annotation by fuzzy based contextual cueing label propagation
- **Jinhui Tang, Xian-Sheng Hua**: Typicality ranking: beyond accuracy for video semantic annotation
- **Chunlei Yang, Jinye Peng, Xiaoyi Feng, Jianping Fan**: Integrating bilingual search results for automatic junk image filtering
- **G. Nur, H. Kodikara Arachchi, S. Dogan, A. M. Kondoz**: Seamless video access for mobile devices by content-aware utility-based adaptation
- **Lifang Wu, Yu Gong, Xingdi Yuan, Xiuzhen Zhang…**: Semantic aware sport image resizing jointly using seam carving and warping
- **Guodong Jing, Yunhui Shi, Dehui Kong, Wenpeng Ding…**: Image super-resolution based on multi-space sparse representation
- **Min Xu, Jinqiao Wang, Xiangjian He, Jesse S. Jin…**: A three-level framework for affective content analysis and its case studies
- **Yun Ge, Bao-cai Yin, Yan-feng Sun, Guo-dong Jing**: Expansion of 3D face sample set based on genetic algorithm
- **Jinqiao Wang, Bo Wang, Ling-yu Duan, Qi Tian…**: Interactive ads recommendation with contextual search on product topic space
- **Florian Stegmaier, Harald Kosch, Ralf Klamma…**: Multimedia on the web - editorial
- **Davy Van Deursen, Wim Van Lancker, Erik Mannens…**: Experiencing standardized media fragment annotations within HTML5
- **Bernhard Haslhofer, Robert Sanderson, Rainer Simon…**: Open annotations on multimedia Web resources
- **Madjid Sadallah, Olivier Aubert, Yannick Prié**: CHM: an annotation- and component-based hypervideo model for the Web
- **Britta Meixner, Jürgen Hoffmann**: Intelligent download and cache management for interactive non-linear video
- **Thomas Kurz, Georg Güntner, Violeta Damjanovic…**: Semantic enhancement for media asset management systems

- **Dejan Kovachev, Yiwei Cao, Ralf Klamma**: Building mobile multimedia services: a hybrid cloud computing approach
- **Bogdan Emanuel Ionescu, Klaus Seyerlehner…**: An audio-visual approach to web video categorization
- **Claudio Cusano, Simone Santini**: With a little help from my friends
- **Antonio da Luz, Eduardo Valle, Arnaldo de A. Araújo**: Non-collaborative content detecting on video sharing social networks
- **Khaled Ahmed Nagi Rashed, Dominik Renzel, Ralf Klamma…**: Community and trust-aware fake media detection
- **Vanessa El-Khoury, David Coquil, Nadia Bennani…**: Personalized video adaptation framework (PIAF): high-level semantic adaptation
- **Markus Waltl, Christian Timmerer, Benjamin Rainer…**: Sensory effects for ambient experiences in the World Wide Web
- **Dick C. A. Bulterman, Pablo Cesar, Ethan Munson…**: Multimedia authoring and annotation
- **Jean Ribeiro Damasceno, Joel André Ferreira dos Santos…**: EDITEC - a graphical editor for hypermedia composite templates
- **Roberto Gerson A. Azevedo, Eduardo Cruz Araújo…**: Composer: meeting non-functional aspects of hypermedia authoring environment
- **Christine Vanoirbeek, Vincent Quint, Stéphane Sire…**: A lightweight framework for authoring XML multimedia content on the web
- **Britta Meixner, Katarzyna Matusik, Christoph Grill…**: Towards an easy to use authoring tool for interactive non-linear video
- **Robert J. Hendley, Russell Beale, Chris P. Bowers…**: CASAM: collaborative human-machine annotation of multimedia
- **Beat Signer, Moira C. Norrie, Nadir Weibel…**: Advanced authoring of paper-digital systems
- **Meiling Cai, Beiji Zou, Huanzhi Gao, Juan Song**: Motion recognition for 3D human motion capture data using support vector machines with rejection determination

MTAP Volume 70, Issue 3

- **Juan Pedro Muñoz-Gea, Abdelhamid Nafaa…**: Design and analysis of a peer-assisted VOD provisioning system for managed networks
- **Heesung Lee, Jeonghyun Baek, Euntai Kim**: A probabilistic image-weighting scheme for robust silhouette-based gait recognition

Recently published

- **Guillaume Gravier, Claire-Hélène Demarty…**: Classification-oriented structure learning in Bayesian networks for multimodal event detection in videos
- **Ying-Hsuan Huang, Chin-Chen Chang, Chun-Yu Wu**: A DNA-based data hiding technique with low modification rates
- **Wenting Lu, Lei Li, Jingxuan Li, Tao Li…**: A multimedia information fusion framework for web image categorization
- **Xueming Qian, Huan Wang, Xingsong Hou**: Video text detection and localization in intra-frames of H.264/AVC compressed video
- **Irena Orovi#, Milica Orlandi#, Srdjan Stankovi#**: An image watermarking based on the pdf modeling and quantization effects in the wavelet domain
- **Maha Charfeddine, Maher El'arbi, Chokri Ben Amar**: A new DCT audio watermarking scheme based on preliminary MP3 study
- **Ahmed A. Abd El-Latif, Li Li, Xiamu Niu**: A new image encryption scheme based on cyclic elliptic curve and chaotic system
- **Mei-sen Pan, Jian-jun Jiang, Qiu-sheng Rong, Fen Zhang…**: A modified medical image registration
- **Li Jiang, Zhengquan Xu, Yanyan Xu**: Commutative encryption and watermarking based on orthogonal decomposition
- **Ali Asghar Nazari Shirehjini, Abdulsalam Yassine…**: Design and implementation of a system for body posture recognition
- **Rui Sun, Wenjun Zeng**: Secure and robust image hashing via compressive sensing
- **Jianli Liu, Baoqi Zuo, Xianyi Zeng**: The visual quality recognition of nonwovens using a novel wavelet based contourlet transform
- **Wentao Fan, Nizar Bouguila**: Variational learning for Dirichlet process mixtures of Dirichlet distributions and applications
- **Xiaodong Huang, Huadong Ma, Charles X. Ling…**: Detecting both superimposed and scene text with multiple languages and multiple alignments in video
- **Ching-Chiuan Lin, Lun Hao Liao, Kuo Feng Hwang…**: Reversible secret-image sharing with high visual quality
- **Shuh-Ping Sun, Ben-Chih Yuan, Hui-Wen Su**: Full-scale 3D multimedia preoperative planning system for total ankle joint replacement
- **Savvas A. Chatzichristofis, Chryssanthi Iakovidou…**: Mean Normalized Retrieval Order (MNRO): a new content-based image retrieval performance measure
- **Bo Wu, Nan Zhang, Siwei Ma, Debin Zhao, Wen Gao**: Optimal entropy-constrained non-uniform scalar quantizer design for low bit-rate pixel domain DVC
- **Du-Shiau Tsai, Yu-Chi Chen**: Visibility bounds for visual secret sharing based on JND theory
- **Emilio Soto Candela, Mario Ortega Pérez…**: HumanTop: a multi-object tracking tabletop
- **Mohd. Shahrimie Mohd. Asaari, Bakhtiar Affendi Rosdi…**: Intelligent Biometric Group Hand Tracking

(IBGHT) database for visual hand tracking research and development
- **Petros Belimpasakis, Vlad Stirbu**: A survey of techniques for remote access to home networks and resources
- **Jae-Youn Shim, Seong-Whan Kim**: Design of circular dot pattern code (CDPC) for maximum information capacity and robustness on geometric distortion/noise
- **Anna Puig-Centelles, Peter A. C. Varley…**: Automatic terrain generation with a sketching tool
- **Suliman Mohamed Ahmed Gaber, Putra Sumari**: Predictive and content-aware load balancing algorithm for peer-service area based IPTV networks
- **James Nightingale, Qi Wang, Christos Grecos**: Empirical evaluation of H.264/SVC streaming in resource-constrained multihomed mobile networks
- **Yi-Leh Wu, Chun-Tsai Yeh, Wei-Chih Hung…**: Gaze direction estimation using support vector machine with active appearance model
- **Bassem Zayen, Aawatif Hayar, Guevara Noubir**: Game theory-based resource management strategy for cognitive radio networks
- **Esra Satir, Hakan Isik**: A Huffman compression based text steganography method
- **Antonio Louro, Will Machado, Adilson Gonzaga**: Smoothing: A natural way to detect contour features
- **Yunhui Shi, Bo Wen, Wenpeng Ding, Na Qi, Baocai Yin**: Prediction-based realistic 3D model compression
- **Wojciech Mazurczyk, Pawe# Szaga…**: Using transcoding for hidden communication in IP telephony
- **Shingchern D. You, Woei-Kae Chen**: Optimally truncating head-related impulse response by dynamic programming with its applications
- **Hong-Bo Zhang, Shang-An Li, Shu-Yuan Chen, Song Zhi Su…**: Adaptive photograph retrieval method
- **Nasser H. Dardas, Juan M. Silva…**: Target-shooting exergame with a hand gesture control
- **Yunbo Rao, Lei Hou, Zhihui Wang, Leiting Chen**: Illumination-based nighttime video contrast enhancement using genetic algorithm
- **Ming-Quan Fan, Hong-Xia Wang, Heng-Jian Li**: A fingerprint-based audio authentication scheme using frequency domain statistical characteristic
- **Zheng Hui Liu, Hong Xia Wang**: Pseudo-zernike moments-based audio content authentication algorithm robust against feature-analysed substitution attack
- **R. Krishnamoorthy, R. Punidha**: Low bit-rate multi stage vector quantization based on energy clustered training set
- **Carlos Ignacio Mattos, Eduardo Parente Ribeiro…**: An unified VoIP model for workload generation
- **Hengjian Li, Jiashu Zhang, Lianhai Wang**: Robust palmprint identification based on directional representations and compressed sensing
- **Nicolas Seiller, Williem, Nitin Singhal, In Kyu Park**: Object oriented framework for real-time image processing on GPU
- **Hsiang-Fu Yu**: Extension of practical channel transition broadcasting for near video-on-demand applications

TOMCCAP, Volume 10, Issue 4

The Transactions on Multimedia Computing, Communication and Applications are the SIGMM's own Transactions. As a service to Records readers, we provide direct links to ACM Digital Library for the papers of the latest TOMCCAP issue.

- **Tianzhu Zhang, Changsheng Xu:** Cross-Domain Multi-Event Tracking via CO-PMHT
- **Qinghua Huang, Bisheng Chen, Jingdong Wang, Tao Mei:** Personalized Video Recommendation through Graph Propagation
- **Haitao Li, Xu Cheng, Jiangchuan Liu:** Understanding Video Sharing Propagation in Social Networks: Measurement and Analysis
- **Zhiyu Wang, Peng Cui, Lexing Xie, Wenwu Zhu, Yong Rui, Shiqiang Yang:** Bilateral Correspondence Model for Words-and-Pictures Association in Multimedia-Rich Microblogs
- **Yanqiang Lei, Guoping Qiu, Ligang Zheng, Jiwu Huang:** Fast Near-Duplicate Image Detection Using Uniform Randomized Trees
- **Che-Hua Yeh, Brian A. Barsky, Ming Ouhyoung:** Personalized Photograph Ranking and Selection System Considering Positive and Negative User Feedback
- **Song Tan, Yu-Gang Jiang, Chong-Wah Ngo:** Placing Videos on a Semantic Hierarchy for Search Result Navigation

Job Opportunities

Doctoral students & internship positions in social computing

Doctoral student positions and internship positions in social computing at Idiap and EPFL, Switzerland

The Social Computing Research Group at Idiap/EPFL is looking for highly motivated candidates for several doctoral student positions and internship positions in social media, ubiquitous computing, and computational social science.

All positions are available immediately.

* Doctoral student positions

Three PhD student positions are open as part of two new interdisciplinary projects funded by the Swiss National Science Foundation, involving partners in Switzerland and the US. The positions offer the opportunity to do exciting research on social media, mobile and ubiquitous computing, and computational social science.

The doctoral students will be enrolled at the Ecole Polytechnique Fale de Lausanne (EPFL). The positions are for four years.

Candidates will have a master's degree in computer science, information science, or electrical engineering with a strong mathematical and programming background and a genuine interest in interdisciplinary research.

Two of the positions require experience and/or interest in machine learning, ubiquitous and mobile computing, mobile social media and location-based social networks.

The third position requires experience and/or interest in machine learning and multimedia (vision, audio, text) for social video analysis.

* MS project / PhD student internships

Internship positions are available for six-month periods. The positions are open for MS or PhD students to do research on (1) social media analysis, and (2) ubiquitous computing for human behavior analysis. Candidates will have a degree in computer science, information science, or electrical engineering with strong mathematical and programming skills and keen to learn about interdisciplinary research.

Idiap (EPFL's Lidiap laboratory) is located in Martigny in Valais, a scenic region in the south of Switzerland surrounded by the highest mountains in Europe, which offers multiple recreational activities, including hiking, climbing, and skiing, as well as varied cultural activities within close proximity to Lausanne and Geneva. EPFL is one of the top universities in Europe in science and engineering. Both Idiap and EPFL offer a young, multicultural environment with English as the lingua franca. Our research group, led by Dr Daniel Gatica-Perez (www.idiap.ch/~gatica), includes a diverse team of scientific collaborators, research fellows, postdoctoral researchers, doctoral students, and visitors working on multidisciplinary problems.

Interested candidates should email a letter of motivation, a detailed CV, and the names of three references to idiapsc.jobs@gmail.com

Employer: Idiap Research Institute / Social Computing Group
Expiration date: Thursday, July 31, 2014
More information date: http://www.idiap.ch/~gatica

PhD position in the area of distributed MM processing

Project Description:
The aim of the research project is to perform basic research in the area of parallel programming and parallel processing in the context of future distributed large-scale heterogeneous systems, and real-time multimedia applications in particular. We aim to research and develop concepts and mechanisms that will enable the development of software for these next-generation big-data applications, especially in the context of real-time (multimedia) systems. This is achieved by solving fundamental challenges for analyzing, dividing, compiling, scheduling and dispatching of tasks that can run correctly in parallel in a shared distributed system of heterogeneous computing resources in complex topologies.

Your Profile:
The candidates must have very good documented and proven knowledge in the area of systems-oriented, experimental computer science (operating systems, protocols and the architecture of distributed systems). Additionally, strong programming skills are required (and/or good applied math skills), and experience from real-time processing frameworks and video processing is desired.

The internationally distributed nature of these projects, including partners from research and industry, requires the right candidate to have very good communication skills in English. Very good skills in scientific and popular presentation and writing will also be considered in employment decisions.

Simula Offers:

- Excellent opportunities for doing high-quality research
- Generous support for travels and equipment
- Nice office facilities located close to the Oslo fjord and 10 minutes drive from the center of Oslo.
- An informal and including working environment.
- Flexibility in choice of working tools and methods.
- Growth opportunity into advanced infrastructure development.
- A competitive salary.

- Simula strives to achieve a good balance between male and female employees, and women are particularly encouraged to apply.

Employer: Simula Research Laboratory
Expiration date: Thursday, July 31, 2014
More information date: https://www.simula.no/jobs/details.html?nPostingID=54&nPostingTargetID=89&option=52&sort=DESC&respnr=1&ID=QL5FK026203F3VBQBV779QWAD&Resultsperpage=10&lg=UK&mask=simulaweb

Research Engineer in large scale image retrieval/classification

The TexMex team (http://www.irisa.fr/texmex/index_en.php) at INRIA Rennes is currently seeking a motivated R&D engineer to work on large-scale image retrieval and fine-grained classification. The successful candidate will contribute to the experimental setup and showcasing of recent technologies developed in the team. The position is in the context of the Fire-ID French project (http://fire-id.gforge.inria.fr/). The candidate will work closely with Herve Jegou (http://people.rennes.inria.fr/Herve.Jegou/) and will interact with the Computer Vision group of the Xerox Research Centre Europe.

Duration of the contract: 12 months, renewable.

Starting date: ASAP (posted on June 28, 2014)

Responsibilities

- Develop a mobile web application showcasing our latest image classification engine.
- Optimize scientific prototypes to cutting edge performance code.
- Run experiments on large-scale image datasets for retrieval and classification purposes for papers and competitions like ImageNet.
- Produced code may be transferred to our spin-off company for client-defined applications.

Skills and profile

- MSc or BSc in computer science or a related field. A PhD is a plus.
- Strong development skills in shell, C, Python.
- Good know-how in web front-end HTML5, javascript, jQuery, angularJS …
- Good understanding of computer vision/machine learning algorithms and papers and ability to implement and optimize them.

- Ability to convert research code to working demos.
- Fluency in written and oral English. French is a plus.
- High motivation and passion for tech.
- EU citizenship is preferred.

Team and facilities

TexMex is a multi-disciplinary team working on content-based indexing and retrieval in very large multimedia databases. The team consists of researchers on computer vision, machine learning, speech processing, natural language processing and databases. TexMex disposes of a powerful server infrastructure suitable for fast large scale experiments.

Environment

Rennes is a lively city hosting many foreign researchers and students; students represent more than 30% of the population. Rennes is home of multiple telecom and computer vision labs (e.g. Technicolor, Orange Labs, Canon).
The seaside and top tourist destinations of France (Mont St. Michel, St. Malo) are less than an hour away. Paris is 2h30 away by train.

Contact and instructions

Please send your CV, cover letter and the name of at least one reference to:
herve dot jegou at inria dot fr
andrei dot bursuc at inria dot fr
Feel free to get in touch for any extra info and questions.

Employer: Inria
Expiration date: Sunday, August 31, 2014
More information date: http://bit.ly/fireid-job

Research Fellow Position (Video Streaming/SDN) in Ireland

Salary: €51,716 – €56,422 p.a.

Project: An Internet Infrastructure for Video Streaming Optimisation (iVID)

Post Duration: up to 48 months, continuation after 24 months subject to performance review

The Mobile and Internet Systems Laboratory (MISL) in the Department of Computer Science at UCC is an internationally recognised research centre focused on innovative networking research. iVID is a new 4-year research project funded by Science Foundation Ireland to investigate the use of software defined networking (SDN) techniques to optimise the delivery of streaming video. A team of 5 people will be recruited for the iVID project, the most senior of which is

a Research Fellow. This highly visible position requires a senior researcher with prior experience of project/ team management, research student supervision, and of either research commercialization or relevant industry work. The Fellow will be expected to make significant contributions to the direction and progress of the project, pursuing independent research in addition to working closely with the other team members and Prof. Sreenan, the project Principal Investigator.

Applicants must have a PhD qualification in a directly relevant area, with a strong track record of post-doctoral research and peer-reviewed publications in the area. The ideal candidate will have research experience in streaming video or multimedia networking, including network algorithms and optimisation. We also welcome applications from candidates that have expertise in software defined networking expertise and can demonstrate an understanding of the research challenges related to video streaming. Applicants must demonstrate a high level of inter-personal skills, suitable for liaising directly with industry partners and representing the project externally when required. Finally, applicants should have demonstrated the ability to take the initiative in research planning, to contribute to the supervision of post-graduate students, and to contribute to wider research community activities.

Research Fellow Role

The Research Fellow title would be awarded to individuals who have personally secured their own independent external research funding inclusive of their salary following an open, transparent and competitive selection process by the research funding body or who have been appointed by the Higher Education Institution following an open competition. The Research Fellow would still be associated with a Principal Investigator who would act as their mentor and facilitate access to research infrastructure.

The role also allows the Research Fellow the professional development opportunity to demonstrate the capacity for independent and self-directed research and scholarship and the management of a research team. The role allows the Research Fellow to assemble a portfolio of independent achievement and render themselves competitive for tenured academic positions or senior scientific roles in industry.

Key duties and responsibilities

- To manage and conduct a specific programme of research and scholarship.
- To independently identify research objectives and potential funding sources and to prepare and write bids for funding proposals.

- To have a strong track record in securing external funding, including own salary.
- To disseminate the outcomes of the research, including peer-reviewed academic publications of international standing.
- To take a leading role in the further development of the research programme and in seeking and pursuing appropriate external funding.
- To participate fully in the wider research and scholarly activities of the Research Centre, School and College.
- To have some teaching and mentoring duties.
- To supervise post graduate research students as supervisor or co-supervisor, as appropriate.
- To mentor and assist students and early-stage researchers in the research group, School and College.
- To take responsibility for, manage and conduct administrative and management tasks associated with the research programme.
- To engage in appropriate training and professional development opportunities as required by the Principal Investigator, School or College.
- To carry out any additional duties as may reasonably be required within the general scope and level of the post.

Criteria

- A PhD qualification and significant relevant research experience.
- The capacity to work independently on research projects.
- The ability to assess and evaluate concepts/ theories in order to develop original solutions and particular knowledge of, and expertise in research methodologies.
- Track record of high quality peer reviewed publications.
- Experience in post graduate and Post-Doctoral supervision.
- Strong project management experience.
- Ability to provide leadership to small research teams.
- Ability to secure independent external research funding.
- Ability to contribute to broader organisational and management processes.
- Knowledge transfer and commercialisation experience is highly desirable.

For Informal Enquiries on the post candidates should contact:
Prof. Cormac Sreenan
cjs@cs.ucc.ie

To Apply:

By email to Ms. Mary Noonan, m.noonan@cs.ucc.ie, on or before the
closing date of 18 July 2014:

short cover letter;
full CV;
statement of research interests and achievements;
copies of two most significant peer-reviewed papers.
Please use Subject "iVID Research Fellow" and send documents in PDF format.

Supplementary Information on the Department/ Research Centre and the
post is available at the following URL: http://www.ucc.ie/ en/misl/

Employer: University College Cork, Ireland
Expiration date: Friday, July 18, 2014
More information date: http://www.ucc.ie/en/hr/vacancies/ research/full-details-481308-en.html

Tenure Tracker in User Media Interaction

Centrum Wiskunde & Informatica (CWI) invites postdoctoral researchers to apply for a Senior scientist or Tenure tracker in User Media Interaction.

Job description

The position is directly related to the Dutch Creative Industry Top Sector, specifically in the areas of media and entertainment, cultural heritage, design and gaming. The candidate will help CWI to establish research topics, and to secure funding, relevant to the creative industries.
The position is within the Information Access or the Distribution & Interactive Systems, depending on the expertise and preference of the candidate. Research themes in these groups include:

- Dynamic media creation and production (social media, transmedia, storytelling);
- User response and attention to real-time events (engagement, audience feedback);
- Social and immersive consumption of media (ubiquitous media, content adaptation, second screens, social communication, micro-blogging);
- Personal information management, task-based search (information retrieval, evaluation, HCIR);
- Understanding information seeking needs and processes (user studies, click log analyses);
- Understanding what turns data into meaningful information (semantic log analysis, entity-oriented search, support for user interpretation).

The applicant's research should link to the above topics but is not restricted to them. Other example topics are:

- Investigating the user's role in exploratory data analytics;
- Personalization, analysis and recommendation of social media;
- Understanding what makes a meaningful sequence in video communication or meaningful links in text/ images;
- Providing the right information in the right form at the right time;
- Influence of interaction design.

Requirements

We are looking for a candidate with an excellent track record of innovative research and publications in leading international journals and conference proceedings, such as ACM Multimedia, ACM SIGIR, World Wide Web, CHI, Semantic Web (ISWC, JWS), HCIR. The candidate has the ambition and potential to acquire personal research grants such as VENI/VIDI/VICI (NWO) or ERC grants (EU), as well as to acquire external funding for applied research (e.g. from NWO, STW, EU or industry). Moreover, she/he should have post-doctoral experience, and excellent communication skills.

CWI expects its tenure track researchers to speak Dutch at the end of the tenure track.

Employer: Centrum Wiskunde & Informatica: CWI
Expiration date: Friday, August 8, 2014
More information date: http://www.cwi.nl/jobs/senior-scientist-or-tenure-tracker-in-user-media-interaction

Tenure-track (7-year) Assistant Professor position

Assistant Professor Position in Software Engineering (with a Focus on Pattern Recognition and Related Areas) #140055

The Faculty of Education, Science, Technology and Mathematics at the University of Canberra (http://www.canberra.edu.au/) invites applications from early- and mid-career researchers with an outstanding research and teaching track record to join its Discipline of Information Technology & Engineering on a 'tenure-track' (initial 7-year contract) Assistant Professor position. In particular, we are seeking highly motivated, innovative individuals with an excellent research track record in one (or ideally more than one) of the following areas:

- Pattern Recognition

- Human-Computer Interaction / Human-Robot Interaction
- Speech Processing
- Computer Vision
- Human-Centred Computing
- Affective Computing
- Computational Behaviour Analysis
- Machine Learning
- Image Processing
- Signal Processing
- Biomedical Engineering

The succesful candidate is also expected to join and significantly contribute to the research efforts of the Human-Centred Computing Institute (http://staff.estem-uc.edu.au/hcci/). The ideal candidate will have demonstrated experience in inter-disciplinary research at the intersection of the above areas and health, sports, education, communication or security.

The Assistant Professor band at the University of Canberra is a combination of the traditional Australian academic levels B (Lecturer) and C (Senior Lecturer) and provides fast-tracked progression for outstanding applicants. Responsibilities include both research and teaching at both undergraduate and postgraduate level. Opportunities for supervision of PhD and Masters by Research students exist. Successful applicants are expected to make a strong contribution to the research culture at the Human-Centred Computing Institute. Documented success in publishing in high-quality journals and conferences as well as in obtaining external research funding are desired.

Salary Range: AUD92,781 to AUD125,604 p.a. commensurate with experience plus 17% super-annuation

Further information about the position (#140055) can be found at http://www.canberra.edu.au/jobs/vacancies/all.

Closing Date: 30 Jun 2014
(However, applications will be accepted until the position is filled.)

All applications must be submitted electronically to the HR department of the University of Canberra via http://www.canberra.edu.au/jobs/vacancies/all.

Further positions in other disciplines at the Faculty of Education, Science, Technology and Mathematics are currently available, please see http://www.canberra.edu.au/jobs/vacancies/all.

Roland Goecke
Vision and Sensing Group
Human-Centred-Computing Lab
Faculty of Education, Science, Technology and Mathematics

University of Canberra
roland.goecke@canberra.edu.au

Employer: University of Canberra, Australia
Expiration date: Monday, June 30, 2014
More information date:
mailto:roland.goecke@canberra.edu.au

Calls for Contribution

CFPs: Sponsored by ACM SIGMM

ACM MMSys 2015

ACM Multimedia Systems

Submission deadline: 26. September 2014
Location: Portland
Dates: 18. March 2015 -20. March 2015
More information: http://www.mmsys.org/index.php/
sample-page/mmsys-2015/mmsys-2015-call-for-papers
Sponsored by ACM SIGMM

The ACM Multimedia Systems Conference (MMSys) provides a forum for researchers to present and share their latest research findings in multimedia systems. While research about specific aspects of multimedia systems are regularly published in the various proceedings and transactions of the networking, operating system, real-time system, and database communities, MMSys … Read more $_\rightarrow$

EMASC @ ACM MM 2014

1st International Workshop on Emerging Multimedia Applications and Services for Smart Cities

Submission deadline: 01. July 2014
Location: Orlando, Florida, USA
Dates: 07. November 2014 -07. November 2014
More information: https://sites.google.com/site/
emasc2014/
Sponsored by ACM SIGMM

Smart city is the vision of future city – with increasingly instrumented, inter-connected and intelligent urban systems – to improve the quality of life in many aspects including public safety, healthcare, transportation, or energy. With the ever-increasing presence of multi-modal sensors in the smart city infrastructure, multimedia plays an indispensable … Read more $_\rightarrow$

GEOMM @ ACM MM 2014

Geotagging and Its Applications in Multimedia

Submission deadline: 15. July 2014
Location: Orlando, FL, USA
Dates: 03. November 2014 -07. November 2014
More information: http://geomm.org/
Sponsored by ACM SIGMM

The goal of the GEOMM workshop is to bring together cutting-edge research in geotagging as well as novel applications related to geotagging. It will help facilitate in-depth discussions, share existing tools, and ultimately enhance the research efforts in this area. The workshop will serve as a forum for the presentation … Read more $_\rightarrow$

ImmersiveMe @ ACM MM 2014

2nd International Workshop on Immersive Media Experiences

Submission deadline: 09. July 2014
Location: Orlando, FL, USA
Dates: 07. November 2014 -07. November 2014
More information: http://immersiveme2014.di.fc.ul.pt/
Sponsored by ACM SIGMM

Immersive Media Exprinces 2014 builds upon the successful experience of the first edition, held in 2013. Set up in the middle of a media revolution where users are expecting to take part of the action by interacting with and generating content and to experience immersive and personalized environments, the workshop … Read more $_\rightarrow$

ISMM @ ACM MM 2014

ACM 1st Int'l Workshop on Internet-Scale Multimedia Management (ISMM 2014)

Submission deadline: 15. July 2014
Location: Orlando, FL, USA
Dates: 07. November 2014 -07. November 2014
More information: http://www.idmi.nus.edu.sg/ismm2014
Sponsored by ACM SIGMM

One of the characteristics of multimedia information and data is that their scale is massive and requires a technological infrastructure that can accommodate rapid processing, large-scale storage, and flexible analysis of multi-structured data. The ISMM 2014 workshop addresses a focused but broad research theme with an emphasis on how to … Read more $_\rightarrow$

PIVP @ ACM MM 2014

Workshop on Perception Inspired Video Processing

Submission deadline: 01. July 2014
Location: Orlando, FL
Dates: 04. November 2014 -07. November 2014
More information: http://mlab.fau.edu/pivp
Sponsored by ACM SIGMM

The goal of this workshop is to bring together experts working on applying models, principles, and knowledge of human audio-visual perception and cognition to optimize video processing algorithms and applications.

TOMM

ACM Transactions on Multimedia Computing, Communication and Applications

Smartphone-based Interactive Technologies, Systems and Applications

Submission deadline: 18. December 2014
Special issue
More information: http://tomm.acm.org/
CfP_TOMM_SI_SmartphoneBasedInteract.pdf
Sponsored by ACM SIGMM

This special issue of ACM Transactions on Multimedia Computing, Communications and Applications provides an opportunity to attract and bring together mobile computing, cyber-physical systems, ubiquitous computing, social computing, wireless networking and multimedia communications researchers along with user interface designers and practitioners with diverse backgrounds to contribute papers on theoretical, practical, … Read more →

CFPs: Sponsored by ACM (any SIG)

ACM ICN 2014

1st ACM Conference on Information-Centric Networking

Submission deadline: 30. May 2014
Location: Paris, France
Dates: 24. September 2014 -26. September 2014
More information: http://conferences2.sigcomm.org/acm-icn/2014/index.php

Sponsored by ACM

The fundamental concept of Information Centric Networking (ICN) is a transformational architectural shift from the focus on where – addresses and hosts in today's Internet architecture – to what – the content that users and applications care about. ACM ICN-2014 calls for submissions on the research results in all aspects … Read more →

ACM ITS 2014

ACM International Conference on Interactive Tabletops and Surfaces

Submission deadline: 30. June 2014
Location: Dresden, Germany
Dates: 16. November 2014 -19. November 2014
More information: http://its2014.org/
Sponsored by ACM

We invite you to the 2014 ACM International Conference on Interactive Tabletops and Surfaces. Being the 9th event in an annual series, ACM ITS has been established as a premier venue for research in the design, development and use of new and emerging tabletop and interactive surface technologies. Interactive Surfaces … Read more →

MMV Track @ ACM SAC 2015

ACM Symposium on Applied Computing 2105 - Multimedia and Visualization Track

Submission deadline: 12. September 2014
Location: Salamanca, Spain
Dates: 13. April 2015 -17. April 2015
More information: http://acmsac.icmc.usp.br/mmv15/
Sponsored by ACM

The 30th ACM Symposium on Applied Computing – Multimedia and Visualization (MMV) Track 13-17 April 2015, Salamanca, Spain Important due dates (submission deadline is **strict**) September 12, 2014 – Paper submission November 17, 2014 – Author notification December 8, 2014 – Camera-Ready Copy The MMV themes are principles, tools and … Read more →

SAM @ ACM MM 2014

International Workshop on Socially-Aware Multimedia

Submission deadline: 13. July 2014
Location: Orlando (FL), USA

Dates: 07. November 2014 -07. November 2014
More information: https://sites.google.com/site/
sociallyawaremultimedia2014/
Sponsored by ACM

The confluence of computer-mediated interaction, social networking, and multimedia content are radically reshaping social communications, bringing new challenges and opportunities. This workshop provides an opportunity to explore socially-aware multimedia, in which the social dimension of mediated interactions between people are considered as important as the characteristics of the media content. … Read more →

VideoNext @ CoNEXT 2014

1st Workshop on Design, Quality and Deployment of Adaptive Video Streaming

Submission deadline: 22. August 2014
Location: Sydney, Australia
Dates: 02. December 2014 -02. December 2014
More information: http://conferences2.sigcomm.org/co-next/2014/Workshops/VideoNext
Sponsored by ACM

This workshop is related to Dynamic Adaptive Streaming over HTTP (DASH) and how to best adapt the video to ensure highest user quality of experience while consuming the minimum network resources poses many fundamental challenges, which is attracting the attention of researchers from both academia and industry. The goal of … Read more →

CFPs: Sponsored by IEEE (any TC)

CloudCom 2014

The 6th IEEE International Conference on Cloud Computing Technology and Science

Submission deadline: 31. July 2014
Location: Singapore
Dates: 15. December 2014 -18. December 2014
More information: http://2014.cloudcom.org/
Sponsored by IEEE

CloudCom is the premier conference on Cloud Computing worldwide, attracting researchers, developers, users, students and practitioners from the fields of big data, systems architecture, services research, virtualization, security and privacy, high performance computing, always with an emphasis on

how to build cloud computing platforms with real impact. The conference is … Read more →

CSIT 2015

The 7th International Conference onComputer Science and Information Technology

Submission deadline: 22. December 2014
Location: Amman - Jordan
Dates: 18. March 2015 -19. March 2015
More information: http://csit.asu.edu.jo/csit2015/index.php
Sponsored by IEEE

Subject: First CFP CSIT 2015 CSIT2015 is the 7th international conference organized by the Faculty of Information Technology at Applied Science University, Amman, Jordan. It is a peer reviewed technical scientific conference that is technically co-sponsored by IEEE (to be confirmed). The CSIT2015 will include presentations of accepted papers, posters, … Read more →

ICME 2014

IEEE International Conference on Multimedia and Expo 2014

Submission deadline: 16. December 2013
Location: Chengdu, China
Dates: 14. July 2014 -18. July 2014
More information: http://www.icme2014.org/
Sponsored by IEEE

IEEE International Conference on Multimedia & Expo (ICME) has been the flagship multimedia conference sponsored by four IEEE societies (Communications, Computer, Circuits and Systems; and Signal Processing) since 2000. ICME 2014 Registration and Hotel Reservation are Now Open! Chengdu is the Capital of Sichuan Province which is often referred to … Read more →

IEEE BigMM 2015

First IEEE International Conference on Multimedia Big Data

Submission deadline: 14. November 2014
Location: Beijing, China
Dates: 20. April 2015 -22. April 2015
More information: http://www.BigMM.org
Sponsored by IEEE

Multimedia is increasingly becoming the "biggest big data" as the most important and valuable source for

insights and information. It covers from everyone's experiences to everything happening in the world. As such, multimedia big data is spurring on tremendous amount of research and development of related technologies and applications. The … Read more →

IEEE ICSC 2015

IEEE International Conference on Semantic Computing

Submission deadline: 10. October 2014
Location: Anaheim, California, USA
Dates: 09. February 2015 -11. February 2015
More information: http://www.ieee-icsc.org/
Sponsored by IEEE

Semantic Computing (SC) is Computing based on Semantics ("meaning", "context", "intention"). It addresses all types of resource including data, document, tool, device, process and people. The scope of SC includes analytics, semantics description languages and integration, interfaces, and its applications in biomed, IoT, cloud computing, SDN, wearable computing, context awareness, … Read more →

IEEE TCSVT

IEEE Transactions on Circuits and Systems for Video Technology

Visual Computing in the Cloud: Cloud Gaming and Virtualization

Submission deadline: 01. September 2014
Special issue
More information: http://www.site.uottawa.ca/~shervin/cloudgamingsi/
Sponsored by IEEE

Cloud gaming leverages the concept of cloud computing to provide online gaming services to players. The idea in cloud gaming is to process the game events in the cloud and to stream the game to the players. Since it uses the cloud, scalability, server bottlenecks, and server failures are alleviated … Read more →

IFIP/IEEE IM 2015

14th IFIP/IEEE Symposium on Integrated Network and Service Management

Submission deadline: 15. September 2014

Location: Ottawa, Canada
Dates: 11. May 2014 -15. May 2015
More information: http://www.ieee-im.org/
Sponsored by IEEE

Held in odd-numbered years since 1989, IM 2015 follows the 27 years tradition of NOMS and IM as the primary IEEE Communications Society's forum for technical exchange on management of information and communication technology focusing on research, development, integration, standards, service provisioning, and communication technology focusing on research, development, integration, standards, service provisioning, and user … Read more →

MUSES @ IEEE ISM 2014

1st IEEE International Workshop on Multimedia and Sensory Environment Services

Submission deadline: 18. July 2014
Location: Taichung, Taiwan
Dates: 10. December 2014 -12. December 2014
More information: https://sites.google.com/site/ismmuses2014/
Sponsored by IEEE

With the advancement of multimedia, sensor technology, and wireless communication, we witness a renewed interest in realizing Multimedia and Sensory Environment, such as Smart Home, Ambient Assisted Living (AAL), Intelligent Environment (IE) and the like. The cornerstone of such environment is the availability of vast amount of multimedia data that … Read more →

NetGames 2014

The 13th Annual Workshop on Network and Systems Support for Games

Submission deadline: 22. August 2014
Location: Nagoya, Japan
Dates: 04. December 2014 -05. December 2014
More information: http://netgames2014.web.nitech.ac.jp/
Sponsored by IEEE
In cooperation with ACM SIGMM

The 13th Annual Workshop on Network and Systems Support for Games (NetGames 2014) will be held at Nagoya Institute of Technology, Nagoya, Japan on December 4th-5th, 2014. NetGames brings together researchers and practitioners from academia and industry across the globe to present their latest research on the challenges of today's … Read more →

WMNC 2015

8th IFIP Wireless and Mobile Networking Conference

Submission deadline: 28. February 2015
Location: Belgrade, Serbia
Dates: 23. June 2015 -25. June 2015
More information: http://www.wmnc2015.com/
Sponsored by IEEE

WMNC 2015 combines PWC (Personal Wireless Communications conference), MWCN (Mobile and Wireless Communication Networks conference), and WSAN (Wireless Sensors and Actor Networks conference) into one event. WMNC 2015 provides a forum for discussion between researchers, practitioners and students interested in new developments in mobile and wireless networks, services, applications and … Read more →

WS @ IEEE ICDM 2014

2014 ICDM Workshop on Social Multimedia Data Mining

Submission deadline: 01. August 2014
Location: Shenzhen, China
Dates: 14. December 2014 -18. December 2014
More information: https://sites.google.com/site/smmdm2014/
Sponsored by IEEE

Through this workshop, we intend to offer a common platform to multidisciplinary researchers from academia as well as industry to: present recent advances in social multimedia data mining and multimedia content analysis present next generation technologies for managing rich social multimedia data, with special emphasis on organizing, indexing, retrieving and … Read more →

CFPs: Not ACM-/IEEE-sponsored

ACE 2014

11th Advances In Computer Entertainment Technology Conference

Submission deadline: 21. May 2014
Location: Funchal, Madeira
Dates: 11. November 2014 -14. November 2014

More information: http://www.ace2014.info
In cooperation with ACM

BigData @ WCIT 2014

The International Conference on Data Mining, Internet Computing, and Big Data

Submission deadline: 17. October 2014
Location: Asia Pacific University of Technology and Innovation (APU), Kuala Lumpur, Malaysia
Dates: 17. November 2014 -19. November 2014
More information: http://sdiwc.net/conferences/2014/bigdata2014/

CGMIP 2014

The International Conference on Computer Graphics, Multimedia and Image Processing

Submission deadline: 17. October 2014
Location: Kuala Lumpur, Malaysia
Dates: 17. November 2014 -19. November 2014
More information: http://sdiwc.net/conferences/2014/cgmip2014/

COMCOM

Elsevier Computer Communications

Security and Privacy in Unified Communications: Challenges and Solutions

Submission deadline: 31. October 2014
Special issue
More information: http://www.journals.elsevier.com/computer-communications/call-for-papers/special-issue-on-security-and-privacy-in-unified-communicati/

DES-WS @ IDW 2014

Display Electronic Systems Workshop @ International Display Workshops 2014

Submission deadline: 27. June 2014
Location: TOKI MESSE Niigata Convention Center, Niigata, Japan
Dates: 03. December 2014 -05. December 2014
More information: http://www.idw.or.jp

EBW 2015

The Third International Conference on E-Technologies and Business on the Web

Submission deadline: 12. December 2014
Location: Paris, France
Dates: 26. March 2015 -28. March 2015
More information: http://sdiwc.net/conferences/ebw2015/

EECEA 2014

The International Conference on Electrical, Electronics, Computer Engineering and their Applications

Submission deadline: 17. October 2014
Location: Kuala Lumpur, Malaysia
Dates: 17. November 2014 -19. November 2014
More information: http://sdiwc.net/conferences/eecea2014/

ELEMENT 2014

International Workshop on Enhanced Living EnvironMENTs

Submission deadline: 29. June 2014
Location: Wuerzburg, Germany
Dates: 24. September 2014 -24. September 2014
More information: http://www.aapele.eu/element14

HGAAW 2014

ACCV2014 Workshop: Human Gait and Action Analysis in the Wild: Challenges and Applications

Submission deadline: 10. September 2014
Location: Singapore
Dates: 01. November 2014 -02. November 2014
More information: http://www.multimediauts.org/ACCV2014WSGaitAction/

HuEvent 2014

Workshop on Human-centered Event Understanding from Multimedia

Submission deadline: 30. June 2014
Location: Orlando, Florida, USA
Dates: 03. November 2014 -07. November 2014

More information: http://www.huevent14.uni-kiel.de/en

IAPR MVA 2015

(e.g. International Workshop on Tiny Details of TCP 2012)

Submission deadline: 12. December 2014
Location: Tokyo, Japan
Dates: 18. May 2015 -22. May 2015
More information: http://www.mva-org.jp/mva2015/

ICETC 2014

The International Conference on Education Technologies and Computers (ICETC2014)

Submission deadline: 20. August 2014
Location: Lodz University of Technology, Lodz, Poland
Dates: 22. September 2014 -24. September 2014
More information: http://sdiwc.net/conferences/2014/icetc2014/

IHCI 2014

6th International Conference on Intelligent Human-Computer Interaction

Submission deadline: 10. July 2014
Location: Evry, France
Dates: 08. December 2014 -10. December 2014
More information: http://ihci2014.telecom-sudparis.eu

ISDF 2014

The International Conference in Information Security, and Digital Forensics

Submission deadline: 12. October 2014
Location: Thessaloniki, Greece
Dates: 12. December 2014 -14. December 2014
More information: http://sdiwc.net/conferences/isdf2014/

JSAN

Journal of Sensor and Actuator Networks

Underwater Sensor Networks

Submission deadline: 30. September 2014

Special issue
More information: http://www.mdpi.com/journal/jsan/
special_issues/usn

KICSS 2014

9th International Conference on Knowledge, Information and Creativity Support Systems (KICSS 2014)

Submission deadline: 04. August 2014
Location: Limassol, Cyprus
Dates: 06. November 2014 -08. November 2014
More information: http://kicss2014.cs.ucy.ac.cy/

MBDA @ PCM 2014

International Workshop on Multimedia Big Data Analytics 2014

Submission deadline: 30. September 2014
Location: Kuching, Sarawak, Malaysia
Dates: 01. December 2014 -04. December 2014
More information: http://conference.cs.cityu.edu.hk/
pcm2014/WorkshopPaper_MDBA2.html

MindTrek 2014

Academic MindTrek Conference 2014

Submission deadline: 30. June 2014
Location: Tampere, Finland
Dates: 04. November 2014 -06. June 2014
More information: http://www.academicmindtrek.org

MMM 2015

The 21st Multimedia Modelling Conference

Submission deadline: 15. August 2014
Location: Sydney, Australia
Dates: 05. January 2015 -07. January 2015
More information: http://www.mmm2015.org/

MTAP

Multimedia Tools and Applications

Immersive Media Experiences

Submission deadline: 31. July 2014
Special issue

More information: http://immersiveme2013.di.fc.ul.pt/
ImmersiveMe-MTAP-SpecialIssue-2014_new.pdf

SLAM 2014

2nd Workshop on Speech, Language and Audio in Multimedia

Submission deadline: 12. June 2014
Location: Penang Malaysia
Dates: 09. September 2014 -11. September 2014
More information: http://language.cs.usm.my/SLAM2014/

SoHuman @ SocInfo 2014

3nd International Workshop on Social Media in Crowdsourcing and Human Computation

Submission deadline: 24. August 2014
Location: Barcelona
Dates: 10. November 2014 -10. November 2014
More information: http://eipcm.org/sohuman2014/

Symbiotic 2014

International Workshop on Symbiotic Interaction

Submission deadline: 12. July 2014
Location: Helsinki, Finland
Dates: 30. October 2014 -31. October 2014
More information: http://symbiotic2014.org

TASUS @ EUROPAR 2014

Techniques and Applications for Sustainable Ultrascale Computing Systems

Submission deadline: 30. May 2014
Location: Porto, Portugal
Dates: 25. August 2014 -25. August 2014
More information: http://www.arcos.inf.uc3m.es/~tasus/

VS-Re-ID @ ECCV 2014

Workshop on Visual Surveillance and Re-identification

Submission deadline: 20. June 2014
Location: Zurich, CH
Dates: 12. September 2014 -12. September 2014
More information: http://www.vs-re-id-2014.org/

VSS @ MMM 2015

International Video Search Showcase 2015 (formerly VBS)

Submission deadline: 22. September 2014
Location: Sydney, Australia
Dates: 04. January 2015 -04. January 2015
More information: http://www.videobrowsershowdown.org

WAHM @ UbiComp 2014

Workshop on Ubiquitous Technologies for Augmenting the Human Mind @ UbiComp

Submission deadline: 20. June 2014
Location: Seattle, USA
Dates: 14. September 2014 -14. September 2014
More information: http://recall-fet.eu/wahm2014/

Pradeep Atrey, University of Winnipeg
Christian Timmerer, Klagenfurt University
Pablo Cesar, CWI
Mathias Lux, Klagenfurt University

Back Matter

Notice to Contributing Authors to SIG Newsletters

Impressum