

SIGMM RECORDS

Table of Contents

- 1 **Volume 5, Issue 3, September 2013 (ISSN 1947-4598)**
- 1 **Editorial**
- 1 **MPEG Column: 105th MPEG Meeting**
- 3 **SIGMM Conferences and Journals Ranked High by CCF**
- 4 **An interview with Aljosa Smolic**
- 5 **Report from SLAM 2013**
- 6 **Opencast Matterhorn – Open source lecture capture and video management**
- 9 **ACM SIGMM/TOMCCAP 2013 Award Announcements**
- 9 **SIGMM PhD Thesis Award 2013**
- 10 **SIGMM Outstanding Technical Contributions Award 2013**
- 11 **TOMCCAP Best Associate Editor Award 2013**
- 11 **TOMCCAP Nicolas D. Georganas Best Paper Award 2013**
- 12 **ACM TOMCCAP Special on 20th Anniversary of ACM Multimedia**
- 13 **PhD Thesis Summaries**
- 13 Emanuele Carlini
- 14 Florian Mehm
- 14 **Recently published**
- 14 MMSJ Volume 19, Issue 5
- 15 TOMCCAP, Volume 9, Issue 1s
- 15 TOMCCAP, Volume 9, Issue 4
- 16 **Calls for Contribution**
- 16 CFPs: Sponsored by ACM SIGMM
- 17 CFPs: Not ACM-sponsored
- 17 **Back Matter**
- 17 Notice to Contributing Authors to SIG Newsletters
- 17 Impressum



SIGMM Records

Volume 5, Issue 3, September 2013 (ISSN 1947-4598)

Editorial

Dear Member of the SIGMM Community, welcome to the third issue of the SIGMM Records in 2013.

On the verge of ACM Multimedia 2013, we can already present the receivers of SIGMM's yearly awards, the SIGMM Technical Achievement Award, the SIGMM Best Ph.D. Thesis Award, the TOMCCAP Nicolas D. Georganas Best Paper Award, and the TOMCCAP Best Associate Editor Award.

The TOMCCAP Special Issue on the 20th anniversary of ACM Multimedia is out in October, and you can read both the announcement, and find each of the contributions directly through the TOMCCAP Issue 9(1S) table of contents.

That SIGMM has established a strong foothold in the scientific community can also be seen by the Chinese Computing Federation's rankings of SIGMM's venues. Read the article to get even more motivation for submitting your papers to SIGMM's conferences and journal.

We are also reporting from SLAM, the international workshop on Speech, Language and Audio in Multimedia. Not a SIGMM event, but certainly of interest to many SIGMMers who care about audio technology.

You find also two PhD thesis summaries, and last but not most certainly not least, you find pointers to the latest issues of TOMCCAP and MMSJ, and several job announcements.

We hope that you enjoy this issue of the Records.

The Editors

Stephan Kopf, Viktor Wendel, Lei Zhang, Pradeep Atrey, Christian Timmerer, Pablo Cesar, Mathias Lux, Carsten Griwodz

MPEG Column: 105th MPEG Meeting

— original post by *Multimedia Communication blog*, Christian Timmerer, AAU



Opening plenary, 105th MPEG meeting, Vienna, Klagenfurt

At the **105th MPEG meeting in Vienna, Austria**, a lot of interesting things happened. First, this was not only the 105th MPEG meeting but also the 48th VCEG meeting, 14th JCT-VC meeting, 5th JCT-3V meeting, and 26th SC29 meeting bringing together more than 400 experts from more than 20 countries to discuss technical issues in the domain of coding of audio, [picture (SC29 only),] multimedia and hypermedia information. Second, it was the 3rd meeting hosted in Austria after the 62nd in July 2002 and 77th in July 2006. In **2002**, "*the new video coding standard being developed jointly with the ITU-T VCEG organization was promoted to Final Committee Draft (FCD)*" and in **2006** "*MPEG Surround completed its technical work and has been submitted for final FDIS balloting*" as well as "*MPEG has issued a Final Call for Proposals on MPEG-7 Query Format (MP7QF)*".

The official press release of the 105th meeting can be found here but I'd like to highlight a couple of interesting topics including research aspects covered or enabled by them. Although research efforts may lead to the standardization activities but also enables research as you may see below.

MPEG selects technology for the upcoming MPEG-H 3D audio standard

Based on the responses submitted to the Call for Proposals (CfP) on MPEG-H 3D audio, MPEG selected technology supporting content based on multiple formats, i.e., channels and objects (CO) and higher order ambisonics (HOA). All submissions have

been evaluated by comprehensive and standardized subjective listening tests followed by statistical analysis of the results. Interestingly, when taking the highest bitrate of 1.2 Mb/s with a 22.2 channel configuration, both of the selected technologies have achieved excellent quality and are very close to true transparency. That is, listeners cannot differentiate between the encoded and uncompressed bitstream. A first version of the MPEG-H 3D audio standard with higher bitrates of around 1.2 Mb/s to 256 kb/s should be available by March 2014 (Committee Draft – CD), July 2014 (Draft International Standard – DIS), and January 2015 (Final Draft International Standards – FDIS), respectively.

Research topics: Although the technologies have been selected, it's still a long way until the standard gets ratified by MPEG and published by ISO/IEC. Thus, there's a lot of space for researching efficient encoding tools including the subjective quality evaluations thereof. Additionally, it may impact the way 3D Audio bitstreams are transferred from one entity to the another including file-based, streaming, on demand, and live services. Finally, within the application domain it may enable new use cases which are interesting to explore from a research point of view.

Augmented Reality Application Format reaches FDIS status

The MPEG Augmented Reality Application Format (ARAF, ISO/IEC 23000-13) enables the augmentation of the real world with synthetic media objects by combining multiple, existing standards within a single specific application format addressing certain industry needs. In particular, it combines standards providing representation formats for scene description (i.e., subset of BIFS), sensor/actuator descriptors (MPEG-V), and media formats such as audio/video coding formats. There are multiple target applications which may benefit from the MPEG ARAF standard, e.g., geolocation-based services, image-based object detection and tracking, mixed and augmented reality games and real-virtual interactive scenarios.

Research topics: Please note that MPEG ARAF only specifies the format to enable interoperability in order to support use cases enabled by this format. Hence, there are many research topics which could be associated to the application domains identified above.

What's new in Dynamic Adaptive Streaming over HTTP?

The DASH outcome of the 105th MPEG meeting comes with a couple of highlights. First, a **public workshop** was held on session management and control (#DASHsmc) which will be used to derive additional requirements for DASH. All position papers and presentations are publicly available here. Second, the **first amendment (Amd.1)** to part 1 of MPEG-DASH (ISO/IEC 23009-1:2012) has reached the final stage of standardization and together with the first corrigendum (Cor.1) and the existing part 1, the FDIS of the second edition of ISO/IEC 23009-1:201x has been approved. This includes support for event messages (e.g., to be used for live streaming and dynamic ad insertion) and a media presentation anchor which enables session mobility among others. Third and finally, the **FDIS of conformance and reference software** (ISO/IEC 23009-2) has been approved providing means for media presentation conformance, test vectors, a DASH access engine reference software, and various sample software tools.

Research topics: The MPEG-DASH conformance and reference software provides the ideal playground for researchers as it can be used both to generate and to consume bitstreams compliant to the standard. This playground could be used together with other open source tools from the DASH-IF, GPAC, and DASH@ITEC. Additionally, see also Open Source Column: Dynamic Adaptive Streaming over HTTP Toolset.

HEVC support in MPEG-2 Transport Stream and ISO Base Media File Format

After the completion of High Efficiency Video Coding (HEVC) – ITU-T H.265 | MPEG HEVC at the 103rd MPEG meeting in Geneva, HEVC bitstreams can be now delivered using the MPEG-2 Transport Stream (M2TS) and files based on the ISO Base Media File Format (ISOBMFF). For the latter, the scope of the Advanced Video Coding (AVC) file format has been extended to support also HEVC and this part of MPEG-4 has been renamed to Network Abstract Layer (NAL) file format. This file format now covers AVC and its family (Scalable Video Coding – SVC and Multiview Video Coding – MVC) but also HEVC.

Research topics: Research in the area of delivering audio-visual material is manifold and very well reflected

in conference/workshops like ACM MMSys and Packet Video and associated journals and magazines. For these two particular standards, it would be interesting to see the efficiency of the carriage of HEVC with respect to the overhead.

Publicly available MPEG output documents

The following documents shall be come available at <http://mpeg.chiariglione.org/> (availability in brackets – YY/MM/DD). If you have difficulties to access one of these documents, please feel free to contact me.

- Requirements for HEVC image sequences (13/08/02)
- Requirements for still image coding using HEVC (13/08/02)
- Text of ISO/IEC 14496-16/PDAM4 Pattern based 3D mesh compression (13/08/02)
- WD of ISO/IEC 14496-22 3rd edition (13/08/02)
- Study text of DTR of ISO/IEC 23000-14, Augmented reality reference model (13/08/02)
- Draft Test conditions for HEVC still picture coding performance evaluation (13/08/02)
- List of stereo and 3D sequences considered (13/08/02)
- Timeline and Requirements for MPEG-H Audio (13/08/02)
- Working Draft 1 of Video Coding for browsers (13/08/31)
- Test Model 1 of Video Coding for browsers (13/08/31)
- Draft Requirements for Full Gamut Content Distribution (13/08/02)
- Internet Video Coding Test Model (ITM) v 6.0 (13/08/23)
- WD 2.0 MAR Reference Model (13/08/13)
- Call for Proposals on MPEG User Description (MPEG-UD) (13/08/02)
- Use Cases for MPEG User Description (13/08/02)
- Requirements on MPEG User Description (13/08/02)
- Text of white paper on MPEG Query Format (13/07/02)
- Text of white paper on MPEG-7 AudioVisual Description Profile (AVDP) (13/07/02)

SIGMM Conferences and Journals Ranked High by CCF

SIGMM Conferences and Journals Ranked High by Chinese Computing Federation (CCF)

The Chinese Computing Federation (CCF) Ranking List provides a ranking of peer-reviewed conferences and journals in the broad area of computer science. This list is typically consulted by most academic institutions in China as a quality metric for PhD promotions and tenure track jobs.

The CCF ranking released in 2013 for “Multimedia and Graphics” is at the following link (one may use Google Translate to view the web page in English or other desired language):

<http://www.ccf.org.cn/sites/ccf/biaodan.jsp?contentId=2567814757424>

This CCF 2013 ranking released for “Multimedia and Graphics” conferences and journals is first split into sections A, B, and C, and the conferences are ranked numerically within each section. We are very pleased and excited to share the news that the conferences and journals sponsored by SIGMM have been ranked high in CCF list!

For Multimedia and Graphics conferences:

ACM Multimedia was ranked the highest in the A section, and ACM Conference on Multimedia Retrieval (ICMR) was ranked the highest in the B section.

For Multimedia and Graphics Journals

ACM Transactions on Multimedia Computing, Communications and Application (TOMCCAP) was ranked top in the B section.

This recognition for SIGMM sponsored publishing avenues has been entirely due to the tireless and significant efforts from the organizers, steering committees, SIGMM officers, and most importantly, the multimedia research community.

An interview with Aljosa Smolic

Dr. Aljosa Smolic joined Disney Research Zürich, Switzerland in 2009, as Senior Research Scientist and Head of the “Advanced Video Technology” group. Before he was Scientific Project Manager at the Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institut (HHI), Berlin, also heading a research group. He has been involved in several national and international research projects, where he conducted research in various fields of video processing, video coding, computer vision and computer graphics and published more than 100 refereed papers in these fields. In current projects he is responsible for research in 2D video, 3D video and free viewpoint video processing and coding.

Q: What is your main area of research?

A: I'm working on video processing in a general sense and visual computing. I'm interested in everything related to pixel processing like camera systems, processing visual information, perception and computational systems that are creating high quality output for the user.

Q: What got you interested in this area in the first place?

A: In my studies in electrical engineering I was focusing on audio processing, in a sense that if I wouldn't become a rock star, I still could be an audio engineer. Then I got the opportunity to work at Fraunhofer HHI on Image Processing, where I turned my signal processing interests from audio to image processing, and that's how I ended up here.

Q: Does your research & work influence your private life a lot, like owning a stereoscopic TV, taking a lot of videos and photos, etc.?

A: Yes, in a sense that I'm very critical on any type of visual information. I'm also very picky watching television and I notice all the small imperfections. I have an expert view on cinema, any type of multimedia presentation and audio. On the other hand I don't create too much content myself. I don't have a special camera and I don't do too much of filming. And I don't have too much of fancy 3D equipment for myself at home.

Q: Speaking of 3D equipment at home ... Obviously 3D TV home equipment didn't start off too well. Do you think 3D TV will rise again in say 10-15 years, or will we skip towards the “holodeck”?

A: The holodeck ... I formulated that as my long term research question, so I'm still working on it and it's still a long way. We are not yet there and stereo or 3D TV at home didn't reach the broad adoption that many people thought of two or three years ago. I believe TV is a more difficult thing than for instance home cinema on Blue-Ray. I think business & technology based on 3D Blue-Ray disk work well. You can buy content, which is very well produced to be consumed in a situation very similar to watching a movie in a cinema. But I think it's more difficult to adopt stereoscopic technology for the classic TV watching experience, which should be more social. The quality of the content should be better, and the need to wear glasses is not that accepted for watching TV.

Q: What are possible technological advances between now and the holodeck? Does something like Illumiroom (a project from Microsoft Research, that projects peripheral content around a screen) or higher resolutions like 4K will have an impact?

A: Things like Illumiroom and Philips Ambilight are all a step towards the holodeck as much as stereoscopic TV was. I believe there are a lot of more steps in different directions necessary in order to get a 3D immersive experience. Regarding higher resolutions, I'm not so enthusiastic about 4K. As from what I saw so far the difference between HD and 4k is very subtle. Only under very specific conditions and very specific distances you are able to perceive any difference. So I don't think it matters that much and I don't see that 4K will have that much of an impact over HD.

I rather look forward to HDR. I've seen a few demos which offered an impressive level of experience.

Those displays are starting to become available in professional and consumer markets.

Q: If you would re-start your PhD right now, would you end up in the same field or do you think there is another research direction that is more interesting to you right now?

A: I don't know ... I could always do theoretical physics and go to CERN to try to create black holes, which is always an option. The other option would be to work more on the rock star career. Well, but I'm pretty happy where I ended up right now.

Curriculum Vitae:



Dr. **Aljoša Smolič** joined Disney Research Zurich, Switzerland in 2009, as Senior Research Scientist and Head of the “Advanced Video Technology” group. Before he was Scientific Project Manager at the Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institut (HHI), Berlin, also heading a research group. He has been involved in several national and international research projects, where he conducted research in various fields of video processing, video coding, computer vision and computer graphics and published more than 100 referred papers in these fields. In current projects he is responsible for research in 2D video, 3D video and free viewpoint video processing and coding. He received the Dipl.-Ing. Degree in Electrical Engineering from the Technical University of Berlin, Germany in 1996, and the Dr.-Ing. Degree in Electrical Engineering and Information Technology from Aachen University of Technology (RWTH), Germany, in 2001. Dr. Smolič received the “Rudolf-Urtel-Award” of the German Society for Technology in TV and Cinema (FKTG) for his dissertation in 2002. He is Area Editor for Signal Processing: Image Communication and served as Guest Editor for the Proceedings of the IEEE, IEEE Transactions on CSVT, IEEE Signal Processing Magazine, and other scientific journals. He chaired the MPEG ad hoc group on 3DAV pioneering standards for 3D video. In this context he also served as one of the Editors of the Multi-view Video Coding (MVC) standard. Since many years he is teaching full lecture courses on Multimedia Communications and other topics, now at ETH Zurich.



Dr. **Mathias Lux** is a Senior Assistant Professor at the Institute for Information Technology (ITEC) at Klagenfurt University, where he has been since 2006. He received his M.S. in Mathematics in 2004 and his Ph.D. in Telematics in 2006 from Graz University of Technology. Before joining Klagenfurt University, he worked in industry on web-based applications, as a junior researcher at a research center for knowledge-based applications, and as research and teaching assistant at the Knowledge Management Institute (KMI) of Graz University of Technology. In research, he is working on user intentions in multimedia retrieval and production, visual information retrieval, and serious games. In his scientific career he has (co-) authored more than 60 scientific publications, has served in multiple program committees and as reviewer of international conferences, journals, and magazines, and has organized several scientific events. He is also well known for managing the development of the award-winning and popular open source tools Caliph & Emir and LIRE for visual information retrieval.

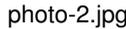
Report from SLAM 2013

Intl. Workshop on Speech, Language and Audio in Multimedia

The International Workshop on Speech, Language and Audio in Multimedia (SLAM) is a yearly series of workshop to bring together researchers working in the broad field of speech, language and audio processing applied to the analysis, indexing and use of any

type of multimedia data (e.g., broadcast, social media, audiovisual archives, online courses, music), with the goal of sharing recent research results, discussing ongoing and future projects as well as benchmarking initiatives and applications.

The very first edition of SLAM was held in Marseille, Aug. 22–23, 2013, as a satellite event of Interspeech 2013. Jointly patronized by the ISCA SIG on Speech and Language in Multimedia and the IEEE SIG on Audio and Speech Processing for Multimedia, the workshop was locally organized by the Laboratoire d'Informatique Fondamentale (LIF) of Aix-Marseille University in a gorgeous location, the Parc du Pharo. SLAM received financial support from local institutions, from national and international associations and from national project in the field of multimedia. Financial support, combined with low-cost organization within a university setting, made it possible to maintain very low registration fees, in particular targeting students.

SLAM 2013 gathered 56 participants from around the world over a day and a half (see ). The workshop was held in a very friendly atmosphere, with plenty of time for discussions on the side and a warm-hearted social event, yet featuring high-profile scientific communications in a number of topics and a keynote speech by Sam Davies on the BBC World Archives. Contributions were organized in five sessions, namely

- audio & video event detection and segmentation
- ASR in multimedia documents
- multimedia person recognition
- speaker & speaker roles recognition
- multimedia applications and corpus

covering most of the topics targeted by the workshop. Major results from a vast number of projects were presented, generating fundamental discussions on the future of speech, language and audio in the multimedia sphere. We however hope to have in the future more contributions regarding non-speech audio processing. Proceedings are available online in open-access mode at <http://ceur-ws.org/Vol-1012>.

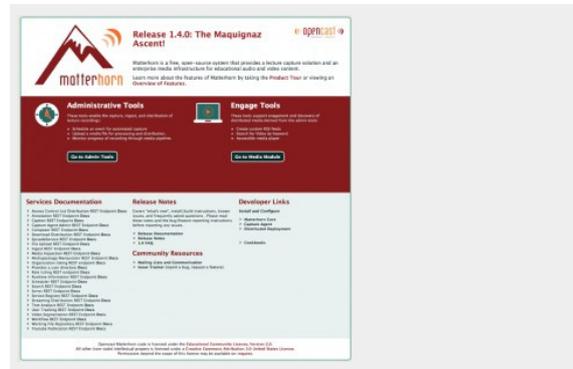
The SLAM workshop intends to establish itself as a yearly event, at the frontier between the audio processing, speech communication and multimedia communities. The second edition will be held in Penang, Malaysia, Sep. 11–12, 2014, as a satellite event of Interspeech 2014. See <http://language.cs.usm.my/SLAM2014/index.html>. We hope to have SLAM organized as a satellite multimedia conferences in the near future and welcome bids for 2015.

Opencast Matterhorn – Open source lecture capture and video management

Since its formation in 2007, Opencast has become a global community around academic video and its related domains.

It is a valid source of inspiring ideas and a huge living community for educational multimedia content creation and usage.

Matterhorn is a community-driven collaborative project to develop an end-to-end, open source solution that supports the scheduling, capture, managing, encoding, and delivery of educational audio and video content, and the engagement of users with that content. Recently (July 2013) Matterhorn 1.4 has been released after almost a year of feature planing, development and bug fixing by the community. The latest version, along with documentation, can be downloaded from the project website at [Opencast Matterhorn](http://Opencast.Matterhorn.org).



Opencast Matterhorn Welcomes Climbers

The first screenshot shows a successful system installation and start in a web browser.

Opencast: A community for higher education

The Opencast community is a collaborative effort, in which individuals, higher education institutions and organizations work together to explore, develop, define and document best practices and technologies for management of audiovisual content in academia. As

such, it wants to stimulate discussion and collaboration between institutions to develop and enhance the use of academic video. The community shares experiences with existing technologies as well as identifies future approaches and requirements. The community seeks broad participation in this important and dynamic domain, to allow community members to share expertise and experience and collaborate in related projects. It was initiated by the founding members of the community [2] to solve the need identified with academic institutions to run an affordable, flexible and enterprise-ready video management system. A list of current system adopters along with a detailed description can be found on the adopters page at List of Matterhorn adopters.

Matterhorn: Underlying technology

Matterhorn offers an open source reference implementation of an end-to-end enterprise lecture capture suite and a comprehensive set of flexible rich media services. It supports the typical lecture capture and video management phases: preparation, scheduling, capture, media processing, content distribution and usage. The picture below depicts the supported phases. These phases are also major differentiators in the system architecture. Additional information is available in [2].



Opencast Matterhorn phases of lecture recording

The core components are built upon a service-based architecture leveraging Java OSGI technology, which provides a standardized, component oriented environment for service coupling and cooperation [1], [2]. System administrators, lecturers or students do not need to handle Java objects, interfaces or service endpoints directly but can create and interact

with system components by using fully customizable workflows (XML descriptions) for media recordings, encoding, handling and/or content distribution.

Matterhorn comes with tools for administrators that allow to plan and schedule upcoming lectures as well as monitor different processes across distributed Matterhorn nodes. Feeds (ATOM/RSS) as well as a browsable media gallery enable users to customize and adapt content created with the system to local needs. Finally content player components (engage applications) are provided which allow to synchronize different streams (e.g. talking head and screen capture video or audience cameras), access content directly based on media search queries and use the media analysis capabilities for navigation purposes (e.g. slide changes).

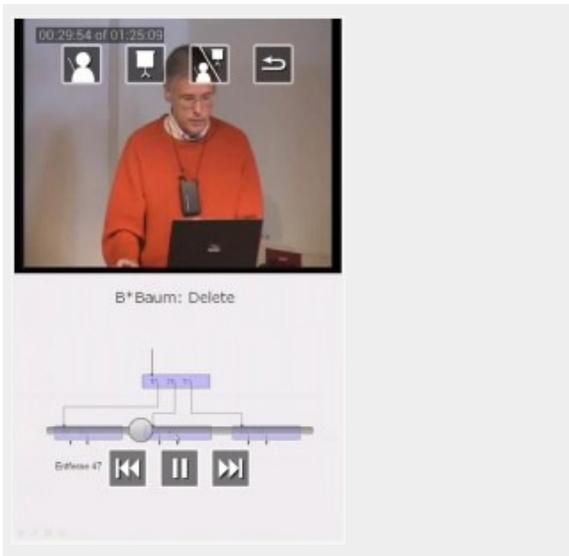


Opencast Matterhorn welcome page

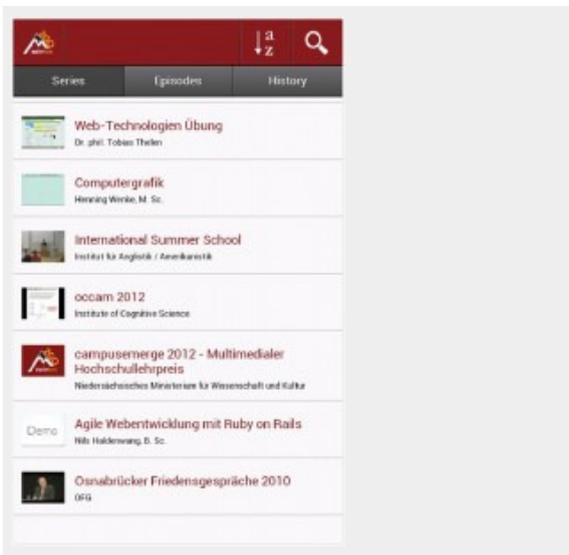
The project website provides a guided feature and demo tour, cookbook and installation sections about how to use and operate the system on a daily basis, as well as links to the community issue/feature tracker system Opencast issues.

Matterhorn2GO: Mobile connection to online learning repositories

Matterhorn 2GO is a cross-platform open source mobile front-end for recorded video material produced with the Opencast Matterhorn system [3]. It can be used on Android or iOS smartphones and tablets. The core technology used is Apache Flex. It has been released in the Google Play Store as well as in Apple's iTunes store. Further information is available on the project website: Download / Install Matterhorn2GO. It brings lecture recordings and additional material created by Opencast Matterhorn to mobile learners worldwide. Matterhorn 2GO comes with powerful in content search capabilities based on Matterhorn's core multimedia analysis features and is able to synchronize different content streams in one single view to fully follow the activity in the classroom. This allows users, for example, to access a certain aspect directly within numerous recorded series and/or single episodes.



A user can choose between three different video view state options: a parallel view (professor and corresponding synchronized slides or screen recording), just the professor or only the lecture slides. Since most Opencast Matterhorn service endpoints offer a streaming option, a user can directly navigate to any time position in the video without waiting until it has been fully downloaded.



The browse media page lists recordings from available Matterhorn installations. Students can simply follow their own eLectures but also get information about what else is being taught or presented at the local university or abroad at other learning institutes.

Stay informed and join the discussion

As an international open source community, Opencast has established several mechanisms for individuals to communicate, support each other and collaborate.

- **General announcements mailing list:** Community@opencast.org ([<Community@opencast.org>](mailto:Community@opencast.org)) — join
- **Matterhorn support mailing list:** Matterhorn-users@opencast.org ([<Matterhorn-users@opencast.org>](mailto:Matterhorn-users@opencast.org)) — join
- **Matterhorn developers mailing list:** Matterhorn@opencast.org ([<Matterhorn@opencast.org>](mailto:Matterhorn@opencast.org)) — join
- **IRC Channel:** #opencast on IRC
- **Opencast Community Site:** <http://opencast.org>
- **Project Site (Wiki and Jira Issue Tracker):** <http://opencast.jira.com>

More information about communication within the community can be found at www.opencast.org/communications.

Conclusion

Matterhorn and the Opencast Community can offer research initiatives a prolific environment with a multitude of partners and a technology developed to be adapted, amended or supplemented by new features, be that voice recognition, face detection, support for mobile devices, semantic connections in learning objects or (big) data mining.

The final objective is to ensure that research initiatives will consider Matterhorn a focal point for their activities.

The governance model of the Opencast Community and the Opencast Matterhorn project can be found online at www.opencast.org/opencast-governance.

Acknowledgments and License

The authors would like to thank the Opencast Community and the Opencast Matterhorn developers for their support and creativity as well as the continuous efforts to create tools that can be used across campuses and learning institutes worldwide. Matterhorn is published under the Educational Community License (ECL) 2.0.

References

[1] Christopher A. Brooks, Markus Ketterl, Adam Hochman, Josh Holtzman, Judy Stern, Tobias Wunden, Kristofor Amundson, Greg Logan, Kenneth Lui, Adam McKenzie, Denis Meyer, Markus Moormann, Matjaz Rihtar, Ruediger Rolf, Nejc Skofic, Micah Sutton, Ruben Perez Vazquez, und Benjamin Wulff. OpenCast Matterhorn 1.1: reaching new heights. ACM Multimedia, pages 703-706. ACM, (2011)

[2] Ketterl, M, Schulte, O. A., Hochman, A. OpenCast Matterhorn: A Community-Driven Open Source Software Project for Producing, Managing, and Distributing Academic Video. International Journal of Interactive Technology and Smart Education, Emerald Group Publishing Limited, Vol. 7 Iss: 3, pp.168 – 180, 2010.

[3] Markus Ketterl, Leonid Oldenburger, Oliver Vornberger. OpenCast 2 Go: Mobile Connections to Multimedia Learning Repositories. In proceeding of: IADIS International Conference Mobile Learning, pages 181-188, Berlin, Germany, 2012

ACM SIGMM/ TOMCCAP 2013 Award Announcements

The ACM Special Interest Group in Multimedia (SIGMM) and ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) are pleased to announce the following awards for 2013 recognizing outstanding achievements and services made in the multimedia community.

SIGMM Technical Achievement Award:
Dr. Dick Bulterman

SIGMM Best Ph.D. Thesis Award:
Dr. Xirong Li

TOMCCAP Nicolas D. Georganas Best Paper Award:
“Exploring interest correlation for peer-to-peer socialized video sharing” by Xu Cheng and Jiangchuan Liu, published in TOMCCAP vol. 8, Issue 1, 2012.

TOMCCAP Best Associate Editor Award:
Dr. Mohan S. Kankanhalli

Additional information of each award and recipient will be released in separate announcements. Awards will be presented in the annual SIGMM event, ACM Multimedia

Conference, held in Barcelona, Catalunya, Spain during October 23-25 2013.

ACM is the professional society of computer scientists, and SIGMM is the special interest group on multimedia. TOMCCAP is the flagship journal publication of SIGMM.

SIGMM PhD Thesis Award 2013

SIGMM Award for Outstanding PhD Thesis in Multimedia Computing, Communications and Applications 2013



The SIGMM Ph.D. Thesis Award Committee is pleased to recommend this year's award for the outstanding Ph.D. thesis in multimedia computing, communications and applications to Dr. Xirong Li.

The committee considered Dr. Li's dissertation titled "Content-based visual search learned from social media" as worthy of the award as it substantially extends the boundaries for developing content-based multimedia indexing and retrieval solutions. In particular, it provides fresh new insights into the possibilities for realizing image retrieval solutions in the presence of vast information that can be drawn from the social media.

The committee considered the main innovation of Dr. Li's work to be in the development of the theory

and algorithms providing answers to the following challenging research questions:

1. what determines the relevance of a social tag with respect to an image,
2. how to fuse tag relevance estimators,
3. which social images are the informative negative examples for concept learning,
4. how to exploit socially tagged images for visual search and
5. how to personalize automatic image tagging with respect to a user's preferences.

The significance of the developed theory and algorithms lies in their power to enable effective and efficient deployment of the information collected from the social media to enhance the datasets that can be used to learn automatic image indexing mechanisms (visual concept detection) and to make this learning more personalized for the user.

Bio of Awardee:

Dr. Xirong Li received the B.Sc. and M.Sc. degrees from the Tsinghua University, China, in 2005 and 2007, respectively, and the Ph.D. degree from the University of Amsterdam, The Netherlands, in 2012, all in computer science. The title of his thesis is "Content-based visual search learned from social media". He is currently an Assistant Professor in the Key Lab of Data Engineering and Knowledge Engineering, Renmin University of China. His research interest is image search and multimedia content analysis. Dr. Li received the IEEE Transactions on Multimedia Prize Paper Award 2012, Best Paper Nominee of the ACM International Conference on Multimedia Retrieval 2012, Chinese Government Award for Outstanding Self-Financed Students Abroad 2011, and the Best Paper Award of the ACM International Conference on Image and Video Retrieval 2010. He served as publicity co-chair for ICMR 2013.

SIGMM Outstanding Technical Contributions Award 2013

SIGMM Award for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications



The 2013 winner of the prestigious ACM Special Interest Group on Multimedia (SIGMM) award for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications is Prof. Dr. Dick Bulterman. He is currently a Research Group Head of the Distributed and Interactive Systems at Centrum Wiskunde & Informatica (CWI) in Amsterdam, The Netherlands. He is also a Full Professor of Computer Science at Vrije Universiteit, Amsterdam. His research interests are multimedia authoring and document processing. His recent research concerns socially-aware multimedia, interactive television, and media analysis.

The ACM SIGMM Technical Achievement award is given in recognition of outstanding contributions over a researcher's career. Prof. Dick Bulterman has been selected for his outstanding technical contributions in multimedia authoring, media annotation, and social sharing from research through standardization to entrepreneurship, and in particular for promoting international Web standards for multimedia authoring and presentation (SMIL) in the W3C Synchronized Multimedia Working Group as well as his dedicated involvement in the SIGMM research community for many years. The SIGMM award will be presented at the ACM International Conference on Multimedia 2013 that will be held Oct 21–25 2013 in Barcelona, Spain.

Dick Bulterman has been a long time intellectual leader in the area of temporal modeling and support for complex multimedia system. His research has led to the development of several widely used multimedia authoring systems and players. He developed the Amsterdam Hypermedia Model, the CMIF document structure, the CMIFed authoring environment, the GRiNS editor and player, and a host of multimedia demonstrator applications. In 1999, he started the CWI spinoff company called Oratrix Development BV, and he worked as CEO to widely deliver this software.

Dick has a strong international reputation for the development of the domain-specific temporal language

for multimedia (SMIL). Much of this software has been incorporated into the widely used Ambulant Open Source SMIL Player, which has served to encourage development and use of time-based multimedia content. His conference publications and book on SMIL have helped to promote SMIL and its acceptance as a W3C standard.

Dick's recent work on social sharing of video will likely prove influential in upcoming Interactive TV products. This work has already been recognized in the academic community, earning the ACM SIGMM best paper award at ACM MM 2008 and also at the EUROITV conference.

In summary, Prof. Bulterman's accomplishments include pioneering and extraordinary contributions in multimedia authoring, media annotation, and social sharing and outstanding service to the computing community.

TOMCCAP Best Associate Editor Award 2013

ACM Transactions on Multimedia Computing, Communications and Applications Best Associate Editor Award



Annually, the Editor-in-Chief of the *ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP)* honors one member of the Editorial Board with the *TOMCCAP Associate Editor of the Year Award*. The purpose of the award is the distinction of excellent work for ACM TOMCCAP and hence also for the whole multimedia community in the previous year. Criteria for the award are (1.) the amount of submissions processed in time, (2.) the performance during the reviewing process and (3.) the accurate interaction with the reviewers in order to broaden the awareness for the journal.

Based on the criteria mentioned above, the ACM Transactions on Multimedia Computing, Communications and Applications Associate Editor of the Year Award 2013 goes to Mohan S. Kankanhalli from the National University of Singapore. The Editor-in-Chief Prof. Dr.-Ing. Ralf Steinmetz cordially congratulates Mohan.

Bio of Awardee:

Mohan Kankanhalli is a Professor at the Department of Computer Science of the National University of Singapore. He is also the Associate Provost for Graduate Education at NUS. Before that, he was the Vice-Dean for Academic Affairs and Graduate Studies at the NUS School of Computing during 2008-2010 and Vice-Dean for Research during 2001-2007. Mohan obtained his BTech from IIT Kharagpur and MS & PhD from the Rensselaer Polytechnic Institute.

His current research interests are in Multimedia Systems (content processing, retrieval) and Multimedia Security (surveillance and privacy). He has been awarded a S\$10M grant by Singapore's National Research Foundation to set up the Centre for "Sensor-enhanced Social Media" (sesame.comp.nus.edu.sg).

Mohan has been actively involved in the organization of many major conferences in the area of Multimedia. He was the Director of Conferences for ACM SIG Multimedia from 2009 to 2013. He is on the editorial boards of several journals including the ACM Transactions on Multimedia Computing, Communications, and Applications, Springer Multimedia Systems Journal, Pattern Recognition Journal and Multimedia Tools & Applications Journal.

TOMCCAP Nicolas D. Georganas Best Paper Award 2013

ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) Nicolas D. Georganas Best Paper Award

The 2013 ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) Nicolas D. Georganas Best Paper Award is provided to the paper *Exploring interest correlation for peer-to-peer socialized video sharing* (TOMCCAP vol. 8, Issue 1) by Xu Cheng and Jiangchuan Liu.

The purpose of the named award is to recognize the most significant work in ACM TOMCCAP in a

given calendar year. The whole readership of ACM TOMCCAP was invited to nominate articles which were published in Volume 8 (2012). Based on the nominations the winner has been chosen by the TOMCCAP Editorial Board. The main assessment criteria have been quality, novelty, timeliness, clarity of presentation, in addition to relevance to multimedia computing, communications, and applications.

In this paper the authors examine architectures for large-scale video streaming systems exploiting social relations. To achieve this objective, a large study of YouTube traffic was conducted and a cluster analysis performed on the resulting data. Based on the observations made, a new approach for video pre-fetching based on social relations has been developed. This important work bridges the gap between social media and multimedia streaming and hence combines two extremely relevant research topics.

The award honors the founding Editor-in-Chief of TOMCCAP, Nicolas D. Georganas, for his outstanding contributions to the field of multimedia computing and his significant contributions to ACM. He exceedingly influenced the research and the whole multimedia community.

The Editor-in-Chief Prof. Dr.-Ing. Ralf Steinmetz and the Editorial Board of ACM TOMCCAP cordially congratulate the winner. The award will be presented to the authors on October 24th 2013 at the ACM Multimedia 2013 in Barcelona, Spain and includes travel expenses for the winning authors.

Bio of Awardees:



Xu Cheng is currently a research engineer at BroadbandTV, Vancouver, Canada. He received the Bachelor of Science from Peking University, China, in

2006, Master of Science from Simon Fraser University, Canada, in 2008, and PhD from Simon Fraser University, Canada, in 2012. His research interests included multimedia networks, social networks and overlay networks.



Jiangchuan Liu is an Associate Professor in School of Computing Science, Simon Fraser University, British Columbia, Canada. He received BEng(cum laude) from Tsinghua University in 1999 and PhD from HKUST in 2003, both in computer science. He is a co-recipient of ACM Multimedia'2012 Best Paper Award, IEEE Globecom'2011 Best Paper Award, IEEE Communications Society Best Paper Award on Multimedia Communications 2009, as well as IEEE IWQoS'08 and IEEE/ACM IWQoS'2012 Best Student Paper Awards. His research interests are in networking and multimedia. He served on the editorial boards of IEEE Transactions on Multimedia, IEEE Communications Tutorial and Surveys, and IEEE Internet of Things Journal. He will be TPC co-chair for IEEE/ACM IWQoS'2014 at Hong Kong.

ACM TOMCCAP Special on 20th Anniversary of ACM Multimedia

ACM Transactions on Multimedia Computing, Communications and Applications

Special Issue: 20th Anniversary of ACM International Conference on Multimedia

A journey 'Back to the Future'

The ACM Special Interest Group on Multimedia (SIGMM) celebrated the 20th anniversary of the establishment of its premier conference, the ACM International Conference on Multimedia (ACM Multimedia) in 2012. To commemorate this milestone, leading researchers organized and extensively contributed to the 20th anniversary celebration.



from left to right: Malcolm Slaney, Ramesh Jain, Dick Bulterman, Klara Nahrstedt, Larry Rowe and Ralf Steinmetz

The celebratory events started at ACM Multimedia 2012 in Nara Japan, with the "Coulda, Woulda, Shoulda: 20 Years of Multimedia Opportunities" panel, organized by Klara Nahrstedt (center) and Malcolm Slaney (far left). At this panel, pioneers of the field, Ramesh Jain, Dick Bulterman, Larry Rowe and Ralf Steinmetz, from left to right shown in the image, reflected on innovations, and successful and missed opportunities in the multimedia research area.

This special issue of the ACM Transaction on Multimedia Computing, Communication and Applications (TOMCCAP) is the final event to celebrate achievements and opportunities in a variety of multimedia areas. Through peer-reviewed long articles and invited short contributions, readers will get a sense of the past, present and future of multimedia research. The evolution ranges over traditional topics such as video streaming, multimedia synchronization, multimedia authoring, content analysis, and multimedia retrieval to newer topics including music retrieval, geo-tagging context in worldwide community of photos, multi-modal humancomputer interactions and experiential media systems.

Recent years have seen an explosion of research and technologies in multimedia, beyond individual algorithms, protocols and small scale systems. The scale of multimedia innovations and deployment has exploded with unimaginable speed. Hence, as the multimedia area is growing fast, penetrating every facet of our society, this special issue fills an important need to look back at the multimedia research achievements

over the past 20 years, celebrates the exciting potential, and explores new goals of the multimedia research community.

Visit dl.acm.org/tomccap to view in the DL.

PhD Thesis Summaries

Emanuele Carlini

Combining Peer-to-Peer and Cloud Computing for Large Scale On-line Games

Supervisor(s) and Committee member(s): Laura Ricci (supervisor), Massimo Coppola (advisor), Alberto Montresor (advisor)
URL: <http://e-theses.imtlucca.it/88/>



This dissertation investigates the combination of Peer-to-Peer (P2P) and Cloud Computing to support Massively Multiplayer Online Games (MMOGs). MMOGs are large-scale distributed applications allowing for a large amount of users worldwide to share a real-time virtual environment. Today's commercial architectures for MMOG are over-sized to support peak loads, therefore expensive and hardly adaptable to the variable load of the application. In this context, the on-demand resources provisioning, in particular Cloud Computing, represents an attractive solution. The possibility of renting machines lifts the operators from the burden of buying and maintaining hardware, while the pay-per-use model pairs with the seasonal access patterns of the MMOGs. However, the provisioning of machines must be carefully orchestrated to deal with the start-up time of on-demand resources and with the expenses of bandwidth consumption. Such expenses may be further reduced by exploiting P2P

mechanisms that involves user-provided resources. These mechanisms expose inherently scalability and robustness, but require additional techniques to cope with the unreliability of user-provided resources.

In this light, we introduced a two components architecture for MMOG combining on-demand and user-provided resources. The first component is dedicated to the management of the position inside the MMOG. It employs a combination of a centralized server and P2P protocols for the management of the movement of the players. An overlay connecting the user-provided nodes is built in a completely distributed fashion, by employing gossip-based communications. This overlay provides nodes with the ability to discover and retrieve knowledge about the state of the MMOG, therefore decreasing the amount of requests sent to the centralized servers.

The second component manages the interaction within the MMOG. It employs a structured P2P approach to distribute the effort of the state management among multiple nodes, including on-demand and user-provided nodes. An adaptive provisioning of nodes is performed according to the current and the predicted load of the MMOG. Heuristics are employed with the aim of minimizing the cost, while keeping a target level in the quality of service. Using realistic workloads, we show that our combined P2P and Cloud architecture effectively reduces the cost of running an MMOG architecture, while offers a level of service comparable with centralized architectures.

Florian Mehm

Authoring of Adaptive Single-Player Educational Games



Digital Educational Games, as one of the most important application areas of Serious Games, combine positive properties of digital games, such as strong motivation for players and inherent learning processes,

with educational methods and technologies. Adaptive algorithms allow such games to be aligned automatically to the needs of different players, thereby increasing the learning efficacy. However, educational games are among the most complex game production endeavors, since they are often faced with small budget on the one hand and special requirements with impacts on all aspects of game development, from design through programming to asset production, on the other.

Authoring tools have been successfully created and used in fields related to Serious Games and educational games, including e-Learning, multimedia, interactive storytelling and entertainment games. These tools incorporate parts of the production workflows in their respective areas and allow all authors, including non-programmers, to create applications. While it appears beneficial to create authoring tools for educational games, we find that authoring tools for educational games have to account for the higher complexity and interactivity of games compared to other forms of multimedia and that they have not been researched thoroughly in the past.

These challenges are addressed in this thesis by presenting a concept for an authoring tool for adaptive educational single-player games that accounts for the specifics of educational game development. Major results are an educational game description model, concepts for adaptive control of educational games and author support mechanisms specifically for adaptive educational game authoring. These concepts are implemented in the authoring tool "StoryTec", which is validated in the course of a set of evaluation studies. The novel features of StoryTec include the specific support for adaptive educational games, a concept for structural and interaction templates shown to increase the efficiency and effectiveness of the authoring tool, as well as the support for collaborative work. It builds the foundation for a number of current and future research and development projects, including the extension towards authoring of multi-player games, and is tested and used by over 120 members of an open community.

KOM, TU-Darmstadt

URL: <http://kom.tu-darmstadt.de>

Recently published

MMSJ Volume 19, Issue 5

Editor-in-Chief: Thomas Plagemann

URL: <http://www.springer.de/>

Published: October 2013

- Xiaohua Zhai, Yuxin Peng, Jianguo Xiao: **Cross-media retrieval by intra-media and inter-media correlation mining**
- Wei Xu, Jane Mulligan: **Panoramic video stitching from commodity HDTV cameras**
- Manfred Del Fabro, Laszlo Böszörményi: **State-of-the-art and future challenges in video scene detection: a survey**
- B. Joveski, M. Mitrea, P. Simoens, I. J. Marshall, F. Prêteux, B. Dhoedt: **Semantic multimedia remote display for mobile thin clients**

TOMCCAP, Volume 9, Issue 1s

Editor-in-Chief: Ralf Steinmetz
URL: <http://tomccap.acm.org/>
Published: October 2013
sponsored by ACM SIGMM

ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP) – Special Sections on the 20th Anniversary of ACM International Conference on Multimedia, Best Papers of ACM Multimedia 2012

- Ralf Steinmetz: **Editorial note**

SECTION: 1 - Special Section on the 20th Anniversary of ACM International Conference on Multimedia

- Klara Nahrstedt, Rainer Lienhart, Malcolm Slaney: **Introduction to the special section on the 20th anniversary of the ACM international conference on multimedia**
- Baochun Li, Zhi Wang, Jiangchuan Liu, Wenwu Zhu: **Two decades of internet video streaming: A retrospective view**
- Zixia Huang, Klara Nahrstedt, Ralf Steinmetz: **Evolution of temporal multimedia synchronization principles: A historical viewpoint**
- Dick C. A. Bulterman, Pablo Cesar, Rodrigo Laiola Guimarães: **Socially-aware multimedia authoring: Past, present, and future**
- Lei Zhang, Yong Rui: **Image search-from thousands to billions in 20 years**
- Lawrence A. Rowe: **Looking forward 10 years to multimedia successes**
- Prashant Shenoy: **Multimedia systems research: The first twenty years and lessons for the next twenty**
- Kien A. Hua: **Online video delivery: Past, present, and future**
- Viswanathan Swaminathan: **Are we in the middle of a video streaming revolution?**

- Philip A. Chou: **Advances in immersive communication: (1) Telephone, (2) Television, (3) Teleportation**
- Shih-Fu Chang: **How far we've come: Impact of 20 years of multimedia information retrieval**
- Wolfgang Effelsberg: **A personal look back at twenty years of research in multimedia content analysis**
- Alan Hanjalic: **Multimedia retrieval that matters**
- Matthew Turk: **Over twenty years of eigenfaces**
- Brian Whitman: **Care and scale: Fifteen years of music retrieval**
- Richard Szeliski, Noah Snavely, Steven M. Seitz: **Navigating the worldwide community of photos**
- Elisabeth Andre: **Exploiting unconscious user signals in multimodal human-computer interaction**
- Hari Sundaram: **Experiential media systems**

SECTION: 2 - Special Section of Best Papers of ACM Multimedia 2012

- Ioannis (Yiannis) Kompatsiaris, Wenjun (Kevin) Zeng, Gang Hua, Liangliang Cao: **Introduction to the special section of best papers of ACM multimedia 2012**
- Heng Liu, Tao Mei, Houqiang Li, Jiebo Luo, Shipeng Li: **Robust and accurate mobile visual localization and its applications**
- Zhi Wang, Wenwu Zhu, Xiangwen Chen, Lifeng Sun, Jiangchuan Liu, Minghua Chen, Peng Cui, Shiqiang Yang: **Propagation-based social-aware multimedia content distribution**
- Jitao Sang, Changsheng Xu: **Social influence analysis and application on multimedia sharing websites**

TOMCCAP, Volume 9, Issue 4

Editor-in-Chief: Ralf Steinmetz
URL: <http://tomccap.acm.org/>
Published: August 2013
sponsored by ACM SIGMM

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.

- Ralf Steinmetz: **Editorial: Reviewers**
- Kazuya Sakai, Wei-Shinn Ku, Min-Te Sun, Roger Zimmermann: **Privacy preserving continuous multimedia streaming in MANETs**
- Jian Dong, Bin Cheng, Xiangyu Chen, Tat-Seng Chua, Shuicheng Yan, Xi Zhou: **Robust image annotation via simultaneous feature and sample outlier pursuit**

- Arantxa Villanueva, Victoria Ponz, Laura Sesma-Sanchez, Mikel Ariz, Sonia Porta, Rafael Cabeza **Hybrid method based on topography for robust detection of iris center and eye corners**
- Bo Wang, Jinqiao Wang, Hanqing Lu **Exploiting content relevance and social relevance for personalized ad recommendation on internet TV**
- Kazi Masudul Alam, Abu Saleh Md Mahfujur Rahman, Abdulmotaleb El Saddik **Mobile haptic e-book system to support 3D immersive reading in ubiquitous environments**
- Tam V. Nguyen, Si Liu, Bingbing Ni, Jun Tan, Yong Rui, Shuicheng Yan **Towards decrypting attractiveness via multi-modality cues**
- Jinhui Tang, Qiang Chen, Meng Wang, Shuicheng Yan, Tat-Seng Chua, Ramesh Jain **Towards optimizing human labeling for interactive image tagging**
- Bogdan Carbutar, Rahul Potharaju, Michael Pearce, Venugopal Vasudevan, Michael Needham **A framework for network aware caching for video on demand systems**

Location: Singapore
Dates: 19. March 2014 -21. March 2014
More information: <http://ml.sun.ac.za/MMVE2014/>
Sponsored by ACM SIGMM

MMVE at MMSys 2014 Massively Multiuser Virtual Environment (MMVE) systems are spatial simulations that provide real-time human interactions among thousands to millions of concurrent users. MMVEs have experienced phenomenal growth in recent years in the form of massively multiplayer online games (MMOGs) such as World of Warcraft and Lineage, and ... Read more →

MoVid 2014

The 6th ACM Workshop on Mobile Video

Submission deadline: 13. December 2013
Location: Singapore
Dates: 19. March 2014 -19. March 2014
More information: <http://eecs.ucf.edu/movid>
Sponsored by ACM SIGMM

The focus of ACM MoVid'14 to present and discuss recent advances in the broad area of mobile video services. The workshop will provide an interesting venue to discuss widely varying beliefs and understanding being formed among the academic and industrial communities in terms of how next generation mobile video services ... Read more →

Calls for Contribution

CFPs: Sponsored by ACM SIGMM

ACM NOSSDAV 2014

The 24th ACM Workshop on Network and Operating Systems Support for Digital Audio and Video

Submission deadline: 13. December 2013
Location: Singapore
Dates: 19. March 2014 -19. March 2014
More information: <http://nossdav14.iis.sinica.edu.tw>
Sponsored by ACM SIGMM

ACM NOSSDAV 2014 will be co-located with MMSys 2014 and held in Singapore on March 19, 2014. As in previous years, the workshop will continue to focus on both established and emerging research topics, high-risk high-return ideas and proposals, and future research directions in multimedia networking and systems, in a ... Read more →

MMVE 2014

International Workshop on Massively Multiuser Virtual Environments

Submission deadline: 31. October 2013

TOMCCAP

Transactions on Multimedia Computing, Communications and Applications

Multiple Sensorial (MulSeMedia) Multi-modal Media: Advances and Applications

Submission deadline: 18. November 2013
Special issue
More information: <http://multimediacommunication.blogspot.co.at/2013/05/multiple-sensorial-mulsemmedia-multi.html>
Sponsored by ACM SIGMM

Multimedia applications have primarily engaged two of the human senses – sight and hearing. With recent advances in computational technology, however it is possible to develop applications that also consider, integrate and synchronize inputs across all senses, including tactile, olfaction, and gustatory. This integration of multiple senses leads to a ... Read more →

CFPs: Not ACM-sponsored

More information: <http://wmnc2014.uc.pt/>

BAMMF

Bay Area Multimedia Forum

Submission deadline: 07. October 2013
Location: 3174 Porter Drive, Palo Alto, California 94304
Dates: 07. November 2013 -07. November 2013
More information: <http://www.bammf.org>

EEEECEGC 2013

The International Conference on Electrical and Electronics Engineering, Clean Energy and Green Computing

Submission deadline: 11. November 2013
Location: Dubai, United Arab Emirates
Dates: 11. December 2013 -13. December 2013
More information: <http://sdiwc.net/conferences/2013/eeeecegc2013>

Neurocomputing

Elsevier Neurocomputing

Social Media Analytics and Learning

Submission deadline: 01. November 2013
Special issue
More information: <http://www.journals.elsevier.com/neurocomputing/call-for-papers/special-issue-on-social-media-analytics-and-learning/>

VR 2014

IEEE Virtual Reality 2014

Submission deadline: 12. September 2013
Location:
Dates: 29. March 2014 -02. April 2014
More information: <http://ieeevr.org/2014/>
Sponsored by IEEE

WMNC 2014

7th IFIP Wireless and Mobile Networking Conference

Submission deadline: 15. January 2014
Location: Vilamoura, Portugal
Dates: 20. May 2014 -22. May 2014

Back Matter

Notice to Contributing Authors to SIG Newsletters

By submitting your article for distribution in this Special Interest Group publication, you hereby grant to ACM the following non-exclusive, perpetual, worldwide rights:

- to publish in print on condition of acceptance by the editor
- to digitize and post your article in the electronic version of this publication
- to include the article in the ACM Digital Library and in any Digital Library related services
- to allow users to copy and distribute the article for noncommercial, educational or research purposes

However, as a contributing author, you retain copyright to your article and ACM will refer requests for republication directly to you.

Impressum

Editor-in-Chief

Carsten Griwodz, Simula Research Laboratory

Editors

Stephan Kopf, University of Mannheim
Viktor Wendel, Darmstadt University of Technology
Lei Zhang, Microsoft Research Asia
Pradeep Atrey, University of Winnipeg
Christian Timmerer, Klagenfurt University
Pablo Cesar, CWI
Mathias Lux, Klagenfurt University

