1. Awards

Over the last year 2011-2012, we have given out one SIGMM-wide award, the SIGMM Technical Achievement Award 2011.

**SIGMM Technical Achievement Award 2011:** At the ACM Multimedia 2011, held in Scottsdale, Arizona, we have presented our 4th SIGMM Award for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications (shortly Technical Achievement Award) to Professor Shih-Fu Chang from Columbia University for his technical achievements in the area of multimedia processing, retrieval and applications. The awardee for the SIGMM Technical Achievement Award 2011 was selected by the SIGMM Awards Committee Prof. Rainer Lienhart (SIGMM officer and chair of the committee) from University of Augsburg, Germany, Dr. Larry Rowe from FXPal and Prof. Tat-Seng Chua from National University of Singapore.

Prof. Shih-Fu Chang gave a technical presentation “Content-Based Multimedia Retrieval: Lessons Learned from Two Decades of Research” in the plenary session on Tuesday Morning November 29, 2011 and his presentation can be found at [http://dl.acm.org/citation.cfm?id=2072300](http://dl.acm.org/citation.cfm?id=2072300)

Besides the SIGMM-wide award, our flagship journal, ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) acknowledges the work of the associate editors and gives out the **best TOMCCAP associate editor** award to an editor who provides most excellent services to authors and the community. In 2011, Dr. Gerals Friedland from ICSI (International Computer Science Institute) at Berkeley was named the best associate editor of ACM TOMCCAP. The TOMCCAP Editor-in-Chief Prof. Ralf Steinmetz from Technical University of Darmstadt, Germany, presented the award at the banquet of the ACM Multimedia 2011 conference in Scottsdale, Arizona, USA.

In 2011, the editor-in-chief(EiC) of TOMCCAP, Ralf Steinmetz, and the ACM SIGMM chair, Klara Nahrstedt, successfully established the **ACM TOMCCAP Nicolas Georganas named award** for Best Paper, published in the TOMCCAP journal, to honor the memory and outstanding work of Prof. Nicolas Georganas, the founder and first EiC of TOMCCAP, who passed away in July 2010. The first winner of the Nicolas Georganas TOMCCAP Best Paper Award will be announced at the ACM Multimedia 2012 conference in Nara, Japan.

At our SIGMM-sponsored conferences, we have given out numerous conference-specific awards to celebrate the outstanding research as follows:
1.1. ACM International Conference on Multimedia (ACM Multimedia)

The ACM International Conference on Multimedia is the SIGMM flagship conference, and the ACM Multimedia 2011 was held in Scottsdale, Arizona, USA, November 28-December 1, 2011.

a. **Best Paper Award 2011**: This award went to F. Yu, R. Ji, S. Chang, “Active Query Sensing for Mobile Location Search”, team from Columbia University.

b. **Best Student Paper Award 2011**: There were two be awards given in this category.
   a. The first best student paper award was given to W. Wu, A. Arefin, G. Kurrilo, P. Agarwal, K. Nahrstedt, R. Bajcsy, “Color-plus-Depth Level-of-Details in 3D Teleimmersive Video – A Psychophysical Approach”, team from University of Illinois at Urbana-Champaign, and UC Berkeley.
   

Both Best Paper Award and Best Student Paper Awards were presented by Professors Wu-chi Feng, Nicu Sebe, Hari Sundaram.


d. **Best Open Source Software Competition Awards 2011**: There was one award given to J. Hare, S. Samangooei, D. Dupplaw, “OpenIMAJ and Image Terrier: Java Libraries and Tools for Scalable Multimedia Analysis and Indexing of Images”. In addition to the award, there was ‘Honorable Mention’ of two important Open Source Software systems:
   a. **ClassX**: An Open Source Interactive Lecture Streaming System
   
   b. **Opencast Matterhorn 1.1**: Reaching New Heights

The awards were presented by Professors Pablo Cesar and Wei Tsang Ooi

e. **Best Doctoral Symposium Paper 2011**: This award went to Ivan Anselmo, Sipiran Mendoza, “Local Features for Partial Shape Matching and Retrieval”, and the award was presented by Dr. Yu-Ru Lin and Dr. Vincent Oria to the winners.

f. **Multimedia Grand Challenge 2011**: We had a very interesting and inspiring competition for the multimedia grand challenge each year at ACM Multimedia conference. The grand challenges are provided by companies such as Google, Yahoo!, Microsoft, and others. The company representatives then participate in winner selection and award presentation. The winners of this year grand challenge were
   a. **1st Prize**: “Photo Search by Face Positions and Facial Attributes on Touch Devices” by Yu-Heng Lei et al. from National Taiwan University, Taiwan.
   
   b. **2nd Prize**: “Towards Textually Describing Complex Video Contents with Audio-Visual Concept Classifiers” by Chun Chet Tan et al from City University of Hong-Kong, Hong-Kong School of Computer Science, and Fudan University, China.

   c. **Special Prize for the Best Application of a Theoretical Framework**: “Understanding Images with Natural Sentences”, by Yohitaka Ushiku et al from University of Tokyo, Japan.


d. **Special Prize for the Best Integration of Multimedia Media:** “News Browsing System: Multimodal Analysis” by Bruno do Nascimento Teixeira et al from Federal University of Mines Gerais, Brazil.

g. **Social Media Award:** For the first time, we have given an award to the person who made the most interesting comments and who initiated the most interesting discussions on the Social Media Channels. The award went to Dr. Sina Samangooei from University of Southampton, United Kingdom.

h. We have also acknowledged students who received NSF travel grants, we have recognized the "Web Development Teams", "Hive Development Team", the "Volunteer Core Team" with certificates.

1.2. **ACM International Conference on Multimedia Retrieval (ICMR)**

The ICMR 2011 conference is a SIGMM-sponsored conference. This was the 2nd conference after the merger of ACM CIVR (Conference on Image and Video Retrieval) conference and ACM MIR (Multimedia Information Retrieval) workshop, both SIGMM-sponsored events, The ICMR 2012 was held in Hong-Kong, June 5-8, 2012. This conference gives out the following awards:

- **Best Paper Award** after the competition of four papers in the Best Paper Session: The award went to “Linking Visual Concept Detection with Viewer Demographics” by A. Ulges, M. Koch, D. Borth, from German Research Center for Artificial Intelligence, Saarbrucken, Germany.

- **Best Demo Award:** This award went to “Cluster-based Photo Browsing and Tagging on the Go” by S. Papadopoulos, J. Bakalli, Y. Kompatsiaris, E. Schoinas, from Informatics and Telematics Institute, CERTH-ITI, Thessaloniki, Greece.

- **Best Reviewer Award:** The ICMR 2012 introduced for the first time the Best Reviewer Award which went to John Kender from Columbia University.

2. **Significant papers**

There were several papers on new areas published in SIGMM-sponsored proceedings:


This conference has been fully reorganized based on the SIGMM conference committee recommendation, where the effort was led by the SIGMM officer and Director of Conferences, Prof. Mohan Kankanhalli, and the committee chair Prof. Tat-Tseng Chua. The major change has been the explicit introduction of areas that have introduced new directions to the multimedia community, including mobile devices and social and educational aspect of multimedia. The conference was structurally divided into ten areas: (1) multi-modal integration and understanding in the imperfect world, (2) media analysis and search, (3) scalabilty in media processing analysis and applications, (4) multimedia systems and middleware, (5) media transport and sharing, (6) multimedia security, (7) media authoring and production, (8) location-based and mobile multimedia, (9) human, social and educational aspects of multimedia, (10)
arts and contemporary digital culture. Out of these ten areas, four areas are very new in the ACM Multimedia community:

- **Multi-modal integration and understanding in the imperfect world**: In this area, a significant paper was “Audio-visual grouplet: temporal audio-visual interactions for general video concept classification”, by Wei Jiang and Alexander C. Loui from Eastman Kodak Company, Rochester, NY, USA.

- **Scalability in media processing analysis and applications**: In this new area, a significant paper was “Multiple feature hashing for real-time large scale near-duplicate video retrieval”, by Jingkuan Song et al, team from the University of Queensland, Brisbane Australia, Carnegie Mellon University, Pittsburgh, USA, and Hefei University of Technology, Hefei, China.

- **Location-based and mobile multimedia**: In this area, the paper “A mobile location search system with active query sensing” by Felix X. Yu et al, team from Columbia University, New York, USA made a very strong impression.

- **Human, social and educational aspects of multimedia**: The paper “Visual memes in social media: tracking real-world news in YouTube videos” by Lexing Xie et al., the team from Australian National University, Canberra, Australia, IBM Research, Hawthorne, USA, and Columbia University.


This workshop/working conference is under SIGMM sponsorship and it was held June 1-3, 2011, Vancouver, British Columbia, Canada. Significant papers continued to come out in the areas of mobile media delivery and wireless multimedia systems, H.264/SVC video streaming over wired and wireless networks, impact of network coding on WiFi media delivery, social media in large scale VOD systems, content clouds and social media. The discussion about DASH and improving HTTP performance for video streaming, as well as about GPU and multi-core for multimedia continued. Much more care was given to system and networking solutions that addressed energy and delay in multimedia systems.

### 2.3. ACM Multimedia Systems 2012 ([http://www.mmsys.org/?q=node/49](http://www.mmsys.org/?q=node/49))

The SIGMM-sponsored 3rd ACM MMSys conference was held in Chapel Hill, North Caroline, February 22-24, 2012. The organizers combined the MMSys with the MoVid workshop to give a larger importance to mobile multimedia systems. The MMSys was held Wednesday and Thursday, and MoVid workshop was held on Friday, February 24. This year, the organizers also mixed long paper presentations with short paper presentations in various categories. In addition, the conference introduced demos and posters in comparison to previous years.

Several emerging topics were presented in addition to 3D content, DASH protocol for video streaming, adaptation, and other traditional multimedia system topics. Examples of emerging topics and papers are “Multi-video summer and skim generation of sensor-rich videos in geospace”, “Scheduler support for Video-oriented multimedia on client-side virtualization”, and “P2P streaming: a study on the use of advertisements as incentives”.

2.4. ACM ICMR 2012 (http://www.icmr2012.org/)

In addition to the best paper award and best paper candidates in the “Best Paper Session”, which represent significant papers and contributions (see Section 1.2), the conference also had an extensive poster and demo session with traditional multimedia retrieval topics, but also mobile multimedia became much more dominant. Examples were “nepDroid: An Intelligent Mobile Music Player”, search engine for mobile and desktop environments “One Size Does Not Fit All – Multimodal Search on Mobile and Desktop Devices with the I-SEARCH Search Engine”, “Mobile Image Browsing on a 3D Globe”, and others.

2.5. ACM MM&Sec 2011 (http://www.mmsec10.com/)

In this SIGMM-sponsored workshop, held in Buffalo, New York, USA, September 29-30, the researchers discussed aspects of biometrics in travel documents, forensics approaches, biometric devices, and security aspects for document preservation.

3. Significant programs

Throughout the SIGMM-sponsored conferences we had several significant programs that provided a springboard for future technical efforts:

3.1. ACM Multimedia 2011

- Highlight of this conference was again the Multimedia Grand Challenge program organized for the third time as a part of the conference program. Multimedia Grand Challenge is a set of problems and issues from a number of industry leaders geared to engage the multimedia research community in solving relevant, interesting and challenging questions about the industry’s 2-5 year horizon for multimedia. Researchers were encouraged to submit working systems in response to the challenge. A large number of submissions were received for this first edition of the competition. We will be continuing with this challenge in ACM Multimedia 2012.
- Open Source Competition included this year educational component.
- Doctoral Symposium encouraged all student authors to participate.
- We would also like to highlight the “Industrial Exhibit” and “Industrial Panels” programs as well as the “Doctoral Symposium panel” on “Job opportunities and career perspective for fresh graduates of the multimedia community.
- With nine well-attended tutorials and two other panels, the “Tutorials” and “Panels” programs were very success.
3.2. ACM MMSys 2012

There were two interesting keynote talks talking about large scale video distribution systems. One keynote speaker was Dr. Deepak Turaga from IBM Watson Research Laboratory and the second speaker was Dr. Leonidas Kontothanassis from Google, both giving very interesting industrial perspectives on video distribution.

MMSys 2012 also continued with the gathering, advertising and disseminating very interesting datasets such as “6DMG: A New 4D Motion Gesture Database” (team from Georgia Tech), “DASH Datasets” (team University of Klagenfurt, Austria), and “Network Traffic from Anarchy Online: Analysis, Statistics, and Applications” (team from U. Oslo and Simula Research Laboratory, Norway).

3.3. ACM ICMR 2012

The conference continued with the “Practitioner Day” bringing in industry researchers and discussing problems faced by the practitioners.

The SIGMM-sponsored ACM ICMR 2012 conference had two interesting special sessions with interesting papers. One was on the “Social Events in Web Multimedia” and the second was on “Socio-Video Semantics”. The most significant paper in the “Socio-Video Semantics” session was also the Best Paper of the conference, the “Linked Event Concept Detection with Viewer Demographics”.

4. Innovative programs

Several SIGMM-sponsored conferences had innovative programs which provided service to technical community:

4.1. ACM Multimedia 2010

- **Open Source Competition** brings major service to technical community since software is then released to the community with corresponding agreements in place.
- We have organized the “Networking of Multimedia Women” event with a specific discussion theme “Beyond Epsilon Science: Where To Look and How to Realize New Opportunities” which included a panel of leading female multimedia researchers, Prof. Svetha Venkatesh, Prof. Nalini Venkatasubramanian, Dr. Dulce Ponceleon, Prof. Susanne Boll and Dr. Maria Zemankova.
- We have providing state of the art tutorial presentations free (because of all inclusive registration fees) to conference participants.
- We have provided 1 year complimentary SIGMM membership to all participants (except student registrations).
- The registration allowed free access to all workshops held along with MM’11 for all participants (including students) which increased the attendance of workshops.
All accepted papers for oral presentation (workshops and conference) were included in the Poster Plenary Sessions.

4.2. **ACM MMSys 2012**

The co-location of the MoVid workshop with MMSys’12 worked very well. Many participants stayed the full three days and attended the various presentations of the Mobile Video (MoVid) Workshop. The reason was that the mobile multimedia is a very hot topic currently, as well as the papers, panel and keynote speaker, Jim van Welzen from NVIDIA talked about innovative commercial multimedia applications which was very motivating.

4.3. **ACM ICMR 2012**

The organizers invited attendees to interesting special sessions on innovative and frontier topics the “Social Events in Web Multimedia” and “Socio-Video Semantics”.

The industry session of the “Practitioner Day” had several interesting topics ranging from “Contextual Internet Multimedia Advertising” from Microsoft Research to “From Big Data to Deep Knowledge” from Huawei (large Cisco telco) new research lab in Hong-Kong, named the “Noah’s Ark Lab”.

5. **Brief summary for the key issues that the memberships of SIGMM will have to deal with in the next 2 years**

The key issues are:

a. Execute special events to **celebrate 20th anniversary** of ACM Multimedia conference in 2012 in Nara, Japan.
   a. We are preparing a **plenary panel** at the ACM Multimedia 2012 and a **special issue in TOMCCAP** to celebrate the 20th anniversary.
   b. Come up with a **sustainable funding model** for the multimedia art community within the SIGMM community and their participation at our premier ACM Multimedia conference.
   c. Expand SIGMM presence in various social networks.
      a. At ACM Multimedia 2011, we had used **Twitter** to collect opinions, **Facebook**, the **SIGMM website**, and other social networks (see website) to increase presence of the conference and other SIGMM events, but more needs to be done.
      b. Good examples to continue and expand are: At ACM Multimedia 2011 we have introduced the **social media award**, and more needs to be done. At ICMR’12, **photo-slide presentation** has been prepared and posted on the conference website.
   d. Increase **industry participation** in SIGMM activities to strengthen ties and increase impact between industry and academia.
a. ACM Multimedia 2011 brought in “Industry Exhibits and Technical Demos” together. The **Open Source Software Challenge** is a very strong program to accomplish the goal. The **Industrial Panel** “Innovating the Multimedia Experience” discussed innovation in industry and how to innovate new multimedia experience.

b. ACM ICMR 2012 did a good job with the “**Practitioner Day**”, although it was shorter and with less industry representation than in the previous year.

c. ACM MMSys 2012 brought again **keynote speakers** from IBM, Google, and MoVid’12 invited NVIDIA speaker which provided very strong industrial relevance to the multimedia systems research.

d. ACM NOSSDAV 2011 had Google keynote speaker.

e. Automate process for talks content, web, other **SIGMM material preservation** at SIGMM venues. We have established preservation committee for ACM Multimedia conference as part of the organizing committee, but for other SIGMM-sponsored events, we do not have organized effort and it depends on the chair and culture of the conference. We need to do more in this area.

a. ACM MMSys 2012 did a very good job collecting all slides of presenters and shared the slides on the conference website.

f. Increase **SIGMM participation of female researchers**. We have started to go in this direction at ACM Multimedia event, but other SIGMM-sponsored events do not have coordinated events, and we need to do more.

a. We have started this task with **lunch at ACM Multimedia 2010**, the event “**Networking of Multimedia Women**” including a discussion and panel at ACM Multimedia 2011 and we are planning an activity at ACM Multimedia 2012.

b. SIGMM has partnered with **ACM-W** to fund one female student to attend the premier SIGMM conference in her area of interest.

g. Build up the next generation of **SIGMM volunteers** to serve as SIGMM officers, chairs, leaders of various SIGMM sponsored activities and venues.

a. We have a very active group of volunteers that drive very diverse activities of ACM SIGMM, but we need to bring new members in.

h. Consider **additional SIGMM-wide award(s)** to recognize wider multimedia community achievements such as service, education, mid-level research achievements, etc. The goal is to propose SIGMM Educational Award, “Test of Time Paper Award”, and “Rising Star Award” over the next few years.

i. Start **SIGMM election** preparation, since in June 2013, new SIGMM officers need to be elected. The goal is to put forward volunteers who will stand in the election for three positions: SIGMM Chair, SIGMM Vice Chair and SIGMM Director of Conferences. After election, provide a smooth transition of activities, tasks and responsibilities to the new SIGMM officers. Klara Nahrstedt will serve as the SIGMM Nomination Committee chair.


6. **Other Highlights in SIGMM activities**
a. Prof. Mohan Kankanhalli, the SIGMM Director of Conferences, executed with the team of ACM Multimedia 2011 what was proposed by the review committee which was charged to review the efficiency and organization of our premier ACM Multimedia conference. The chair of the committee was Prof. Tat-Seng Chua. The committee reviewed two aspects of ACM Multimedia and related conferences: (a) the conference organization and (b) the procedures for the management and review of papers for the SIGMM-sponsored conferences. The recommendations were successfully implemented for the first time at ACM Multimedia 2011 conference, held in Scottsdale, Arizona.

b. The streamlined process for the ACM Multimedia conference location bidding works very well. This year at ACM Multimedia 2011, we have decided that ACM Multimedia 2014 will in Orlando, Florida, USA.

c. Our SIGMM e-newsletter, called SIGMM Records, has variety of articles on multimedia tools, PhD theses abstracts, announcements, SIGMM Educational Column featuring various courses in multimedia area, and many other information. It is a tremendous resource to the community.

d. We have made significant progress in SIGMM preservation efforts via the preservation committee, led by Dr. Mohamed Hefeeda, who set up a website to preserve past SIGMM-sponsored venues as well as establish processes towards presentation of SIGMM-sponsored venues and their websites, proceedings, etc.

e. The Editor-in-Chief for ACM Transactions on Multimedia Computing, Communications and Applications, Dr. Ralf Steinmetz, received an approval from ACM Pub Board to start the new ACM TOMCCAP Nicolas Georganas named award for “Best Paper of the Year” published in ACM Transactions on Multimedia Computing, Communications, and Applications.

f. The SIGMM-specific educational committee compiles and keeps up-to-date educational material in the area of multimedia computing, communications, and applications. This effort is led by Dr. Wei Tsang Ooi. This committee now has an editor on the SIGMM e-newsletter editorial board to bring articles on multimedia education to a broader community.

g. The SIGMM chapter in China is flourishing. The chapter’s own conference, International Conference on Internet Multimedia Computing and Communication (ICIMCS 2010) had its second event December 30-31, 2010 in Harbin, China, and the 3rd ICIMCS 2011 was in August 5-7, 2011 in Chengdu, China. The 4th ICIMCS event will be September 9-11, 2012 in Wuhan, China.

h. All SIGMM-sponsored events had a very strong government and industry sponsorship and/or industry participation via talks, papers, demonstrations, including National Science Foundation, and companies such as Microsoft Research, FXPal, Yahoo!, Google, HP Labs, Springer, Technicolor, IBM Research, RICOH Innovations, Callas, 3D Life, Technicolor, CEWE, Deutsche Institute – Florence, British Columbia Arts Council, Provincia Di Firenze, Ente Cassa Di Risparmio Di Firenze, and others.

i. SIGMM had a number of conferences/workshops in-cooperation such as the International Conference on Distributed Smart Cameras (ICDSC 2011) and with it collocated International Working Conference on Advanced Visual Interfaces (AVI) 2011, 10th Annual Workshop on Network and Systems Support for Games (NetGames) 2011,
and others. Note that 13 workshops have been associated with ACM Multimedia 2011, i.e, co-sponsored with SIGMM organization.

j. The **ACM Multimedia 2011** conference had around 617 attendees, it had 58 long papers with acceptance rate of 17.3%, and it had 120 short papers with an acceptance rate of 36.3%.