

SIGMM FY'10 Annual Report

June 2009 – June 2010

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1. Awards

Over the last year 2009-2010, we have given out one SIGMM-wide award, the **SIGMM Technical Achievement award 2009** to Dr. Lawrence Rowe from FXPaI, USA for his technical achievements in the area of multimedia streaming and compression. The SIGMM Technical Achievement award was presented to Dr. Rowe at the SIGMM premier conference, the ACM International Conference on Multimedia 2009, held in October 2009 in Beijing, China.

At the ACM Multimedia 2010, held in Florence, Italy, we will be presenting our 3rd **SIGMM Technical Achievement award 2010** to Prof. Ramesh Jain from UC Irvine for his technical achievements in the area of multimedia processing, retrieval and applications.

The awardees for 2009 and 2010 were selected by the SIGMM awards committee, consisting of Prof. Georganas, Dr. Zhang, SIGMM officer, Prof. Effelsberg (2009) and SIGMM officer, Prof. Rainer Liehart (2010).

Our ACM TOMCCAP (Transactions on Multimedia Computing, Communication and Applications) journal and its editorial board acknowledged every year at the ACM Multimedia conference the **best TOMCCAP associate editor** who provides most excellent services to the authors, reviewers, and the community. In 2009, Prof. Shervin Shirmohammadi from University of Ottawa was named the best associate editor of ACM TOMCCAP.

In 2009, we have applied for **the SIGMM Best PhD thesis award** which was approved and will be presented for the first time at the ACM International Conference on Multimedia 2010, held in October 2010 in Florence, Italy. We will present our first SIGMM Best PhD thesis award to Effrosyni Kokiopoulou from ETH Zurich, Switzerland. The SIGMM awards committee for this award consisted of Prof. Svetha Venkatesh, Prof. Dick Bulterman and SIGMM officer, Prof. Rainer Lienhart.

At our SIGMM-sponsored conferences, we have given out various conference-specific awards as follows:

- a. **ACM Multimedia 2009:** we have given out Best Papers award, Open Source Competition award, Grand Challenge award, Grant Challenge Participants for Most Practical Applications, Grand Challenge Participants for Best Presentation, and Student Travel award.
- b. **ACM CIVR 2010 (International Conference on Image and Video Retrieval):** we have given out the best paper award.
- c. **ACM CIVR 2009:** we have given out a best paper award.

2. Significant papers

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

a. *ACM Multimedia 2009:*

- a. We had papers/presentations in the brave new topics session that indicated a strong and new connection between neuro-scientists and image processing researchers.
- b. We had research papers in interactive art, connected with a very interesting multimedia art exhibition.
- c. We had interesting sessions/papers on learning and concept detection in multimedia; 3D mesh streaming, and much wider set of interesting papers on audio and music research.
- d. Major research and significant papers are happening in Quality of Experience (QoE) as well as connecting QoE with underlying Quality of Service. This conference had a keynote speaker in this area as well as session with interesting papers.

b. *ACM NOSSDAV 2009:*

- a. Significant papers started to come out in the areas of Understanding and Improving User Experiences by the multimedia systems and networking designers, i.e., connecting the user experiences with the underlying system and networking platforms.

c. *ACM Multimedia Systems 2010:*

- a. New papers appeared that combine multimedia systems and networking issues with narrative-driven virtual worlds, convergence of games, multimedia and real-world sensors, and reconfigurable video coders.

d. *ACM CIVR 2009:*

- a. The best paper and hence significant paper that combines relevance learning with social image retrieval was “Unsupervised Multi-Feature Tag Relevance Learning for Social Image Retrieval” by X. Li et al. from University of Amsterdam.

e. *ACM CIVR 2010:*

- a. The best paper represents the significant paper in this venue: “Real-time Bag of Words, Approximately” by J. Uijlings et al.

f. *ACM MIR 2010:*

- a. Special sessions had interesting papers combining (1) statistical modeling and learning for multimedia, (2) processing data streams from body sensor networks and (3) multi-modal music information retrieval.

3. Significant programs

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

a. *ACM Multimedia 2009:*

- a. Highlight of this conference was the *Multimedia Grand Challenge program* organized for the first 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 2010.
- b. ACM NOSSDAV 2009:**
 - a. We had a keynote speaker from a computer graphics area, Prof. Fuchs, who talked about the experiences in building 3D tele-immersive interactive systems for medical domain, and encouraging new directions.
- c. ACM CIVR 2009:**
 - a. *VideOlympics* – an informal competition in which several state-of-the art systems are competing simultaneously on a video retrieval task.
- d. ACM MIR 2010:**
 - a. *MIRFLICKR* Evaluation: The challenge of visual concept detection

4. Innovative programs

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

- a. ACM Multimedia 2009:**
 - a. Open Source Competition brings major service to technical community since software is then released to the community with corresponding agreements in place.
- b. ACM MMSys 2010:**
 - a. Session of four invited speakers/papers from a diverse set of viewpoints on 3D worlds, games, sensors in games, and video gaming standards.
- c. ACM CIVR 2009:**
 - a. Participation of CIVR practitioners such as content owners, creators, archivists, service providers, and policy makers.
- d. ACM CIVR 2010:**
 - a. Practitioners' Day included two sessions showing Asia perspectives and European perspectives in Image and Video Retrieval.
- e. ACM MIR 2010:**
 - a. *Mini-poster and mini-demo Introduction* allowed each presenter in 1 minute to introduce his/her poster and/or demo and entice audience to come to his/her poster and/or demonstration
 - b. *Industrial leadership session* included invited speakers from industry to talk about research opportunities, challenges, and emerging multimedia technologies

5. Brief summary for the key issues that the memberships of SIGMM will have to deal with in the next 2-3 years

The key issues are:

- a. Change by-laws of SIGMM to represent better the changes happening in the SIGMM community, e.g., extending the SIGMM officers' time from 2 years to 3 years in first term and then allowing serve each officer two terms.
- b. Prepare special events to celebrate 20th anniversary of ACM Multimedia conference in 2012.
- c. 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.
- d. Expand SIGMM presence in various social networks.
- e. Increase industry participation in SIGMM activities to strengthen ties and increase impact between industry and academia.
- f. Automate process for talks content, web, other SIGMM material preservation at SIGMM venues.
- g. Increase SIGMM participation of female researchers.

6. Other Highlights in SIGMM activities

- a. We have started a new SIGMM-sponsored conference, the ACM Multimedia Systems conference (MMSys 2010), this year, held in February 2010, in Scottsdale, Arizona.
- b. We have formalized and streamlined the ACM Multimedia conference bidding process (our premier conference) and moved to three year bidding process. This year at ACM Multimedia 2010, we will hear bids for ACM Multimedia 2012 and 2013. This effort is led by the SIGMM officer, Dr. Mohan Kankanhalli.
- c. Our SIGMM e-newsletter has been included into the ACM Digital Library due to the efforts of Editor-in-Chief, Dr. Carsten Griwotz.
- d. We have made significant progress in SIGMM preservation efforts by (1) establishing presentation chair as part of the ACM Multimedia conference organization, (2) establishing a 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. We have new Editor-in-Chief for ACM Transactions on Multimedia Computing, Communications and Applications, Dr. Ralf Steinmetz.
- f. We have established a SIGMM-specific educational committee which 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.
- g. We have assisted Dr. Yong Rui to establish SIGMM chapter in China. This chapter has its own conference that is usually held in Winter. The first conference was held in Winter (December) 2009.

- h. We have volunteers, Dr. Baochun Li and Dr. Rainer Lienhart, who are looking into a stronger ties between SIGMM researchers in academia and industry.
- i. All established SIGMM-sponsored events have very competitive acceptance rates:
 - a. ACM Multimedia 2009 had 305 long paper submissions and 50 long papers were accepted (16.4% acceptance rate). The short paper track received 369 papers and 103 papers were accepted (27.9% acceptance rate).
 - b. ACM NOSSDAV 2009 had 71 submissions and 22 papers accepted;
 - c. ACM CIVR 2009 had 138 papers submitted and 45 accepted (18 oral papers and 27 posters).
 - d. ACM CIVR 2010 had 153 papers submitted and 53 papers were accepted (34.6% acceptance rate). Out of the 53 papers, 16 papers were arranged for oral presentation (10.5% acceptance rate) and 37 papers were arranged as poster presentations (24.2% acceptance rate).
 - e. ACM MIR 2010 had 29% acceptance rate.
- j. All SIGMM-sponsored events have a strong industry sponsorship and/or industry participation via talks, papers, demonstrations, including companies such as Microsoft Research, FXPal, Yahoo!, Google, IBM, HP Labs, Phillips, Nokia, NEC labs, AT&T and many others.
- k. We are planning to merge ACM CIVR and ACM MIR (started as a SIGMM-sponsored Multimedia Information Retrieval Workshop associated with ACM Multimedia) into a major conference, the ACM ICMR (International Conference on Multimedia Retrieval) that will start in 2011, and will be held in April 2011 in Trento, Italy.