

# IM2 Newsletter

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## Contents

### COVER STORY

- IM2 researchers on the Organisation Committee of PetaMedia 1

### FOCUS

- IM2 partners make Switzerland integrate the Management Committee of COST Action "MUMIA" 2
- The Swiss Company Cinetis receives a prestigious European Multimedia Prize 2
- Award-winning publication for Afsaneh Asaei, an IM2 PhD student at Idiap 3
- JPEG Innovations Workshop 3
- Qualinet COST NoE 3

### INSIDE IM2

- News
- Selected publications

## News

### IM2 Summer Institute 2011

September 1<sup>st</sup> - 2<sup>nd</sup> 2011,  
Idiap Research Institute  
(Martigny)

Themes: Scientific talks

<http://www.im2.ch/summer-institute-2011>

Cover Story

## IM2 researchers on the Organisation Committee of PetaMedia

JUNE 26 - JULY 1 2011, ANTALYA, TURKEY

The 2<sup>nd</sup> Spring School on Social Media Retrieval (<http://www.s3mr.eu>) will be held during June 26 – July 01, 2011 in Antalya, Turkey. The event is co-organized by the EU PetaMedia Network of Excellence and EIT ICT LABS.

PetaMedia is a EU Network of Excellence dedicated to R&D in the area of multimedia access and retrieval. PetaMedia is set apart by the PetaMedia Triple Synergy, a combination of:

- User-based collaborative tagging
- Social and peer-to-peer network structures
- Multimedia content analysis

### Organizing Committee

- Naeem Ramzan (Queen Mary, University of London, UK)
- Kai Clüver (TU Berlin, Germany)
- Pascal Kelm (TU Berlin, Germany)
- Sander Koelstra (Queen Mary, University of London, UK)
- Francesca De Simone (EPFL, Switzerland)
- Jong-Seok Lee (EPFL, Switzerland)
- Stevan Rudinac (TU Delft, The Netherlands)

Multimedia content has become ubiquitous on the web, creating new challenges for indexing, access, search and retrieval. At the same time, much of this content is made available on content sharing websites such as YouTube or Flickr, or shared on social networks like Facebook.

In such environments, the content is usually accompanied with metadata, tags, ratings, comments, information about the uploaders and their social network, etc. Analysis of these "social



media" shows a great potential in improving the performance of traditional multimedia analysis, indexing and retrieval approaches by bridging the semantic gap between the "objective" multimedia content analysis and "subjective" users' needs and impressions. The integration of these aspects however is non-trivial and has created a vibrant, interdisciplinary field of research.

Based on the great success of its previous edition (<http://www.s3mr.eu/2010>) in Interlaken, Switzerland, the 2nd Summer School on Social Media Retrieval (S3MR) aims at bringing together young researchers from neighbouring disciplines, offering

(1) Lectures delivered by experts from academy and industry providing a clear and in-depth summary of state-of-the-art research in social media retrieval,

(2) Collaborative projects in small groups providing hands-on experience on integrative work on selected problems from the field.

### Scope:

- Social data analysis
- Multimedia content analysis
- Automatic multimedia annotation / tagging
- Multimedia indexing / search / retrieval
- Implicit media tagging
- Collaborative tagging

More information at:  
<http://www.s3mr.eu>

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## IM2 partners make Switzerland integrate the Management Committee of COST Action "MUMIA"

MULTILINGUAL AND MULTIFACETED INTERACTIVE INFORMATION ACCESS

As of mid-February 2011, Switzerland has integrated the COST Action IC1002 "MUMIA – Multilingual and Multifaceted Interactive Information Access", led by Dr Michail Salampasis, Department of Informatics, Thessaloniki, Greece.



Four Swiss delegates (including two IM2 senior researchers) were nominated in the Management Committee (MC) of the Action.

In particular, Dr Stephane Marchand-Maillet (University of Geneva) has been nominated

as MC member and Dr Daniel Gatica-Perez (Idiap Research Institute) has been nominated as MC Substitute Member.

The purpose of the action is to coordinate the collaboration between Machine Translation (MT), Information Retrieval (IR) and Multifaceted Interactive Information Access (MIIA), fostering research and technology transfer in these areas and play an important role in the definition of the future of search.

We expect the collaboration with the other 17 countries of the Action to be fruitful for IM2.

MUMIA explores innovative frameworks to empower the synergies from the disparate research fields of MT/IR/MIIA within the specific context of patent search and other next generation Web applications.

More information is available at: <http://www.mumia-network.eu>

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## The Swiss Company Cinetis receives a prestigious European Multimedia Prize

MARCH 1ST IN HANOVER, AT THE EUROPEAN MULTIMEDIA FORUM AT CEBIT

Cinetis, a young Swiss company specializing in digitizing and restoring archival film, has just received the highest distinction from the European e-Excellence Label at CeBIT. Created in 2003, this yearly award recognizes innovative companies in the area of information and communication technology. Cinetis received the highest award: the platinum medal.

The prize was awarded to Cinetis last March 1st in Hanover, at the European Multimedia Forum at CeBIT. This is the largest international event for the digital industry. "We are proud and touched to receive this European mark of distinction honoring our work and our passion, which is to bring our client's memories back to life", responded Pierre Ihmle and Jean-Pierre Gehrig, founders of Cinetis.

Since the company was created in 2005, in collaboration with the University of Applied Sciences and the Idiap Research Institute, Cinetis has developed solutions that allow audiovisual archives from the past century to be preserved for posterity. Several thousands of hours of Super8 and 16mm films made by amateur and professional filmmakers have been digitized and restored.



In association with Bolex International, the famous brand of mechanical cameras and projectors, and operating under the name of Bolex-Digital, Cinetis has attracted a loyal client base. A recent partnership with MWA Nova in Berlin, a manufacturer of High Definition film scanners has enabled the company to market its expertise. Cinetis, whose creation was supported by the Ark Foundation, is based at the IdeArk in Martigny (Valais).

### Development of an Image Sharing Platform

To respond to the growing market demand for digital archiving of audiovisual documents, Cinetis is today working with a network of European partners that are in full expansion.

Soon, Cinetis will be in a position to offer its clients a private film and image archive sharing platform which will enable this young company to encourage clients to post their "historical moments" onto social networks, and thereby contribute to the creation of an audiovisual collective memory.

*Jean-Pierre Gehrig*  
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## Award-winning publication for Afsaneh Aseai, an IM2 PhD student at Idiap

IEEE SPOKEN LANGUAGE PROCESSING STUDENT TRAVEL GRANT

The IEEE Speech and Language Processing Technical Committee has completed the evaluation of all student papers. They had approximately 700 papers submitted to the speech and language processing areas, and the committee evaluated all the papers for which student awards were to be considered.

Each paper was independently and blindly reviewed by 4 reviewers; followed by a Meta-Review by a SLTC Committee member, who read over each of the 4 reviews and entered a 5<sup>th</sup> summary review. After this process was completed, a panel of four SLTC Area Committee Members assembled those papers which were recommended as being award quality (approximately 10 were in this list). Next, each of these papers were reviewed again, along with the prior reviews to rank in order those which achieved the highest technical breakthroughs.

The paper, "*Model-Based Compressive Sensing for Multi-Party Distant Speech Recognition*, Aseai Afsaneh, Bourlard Hervé and Cevher Volkan, March 2011", was selected as the winner of the IEEE Spoken Language Processing Student Travel Grant. This Grant is sponsored by X.D. Huang, Alex Acero and Hsiao-Wuen Hon (Microsoft). These individuals have donated the proceeds of their book to help establish this travel grant, and therefore should be commended for their commitment to the educational mission of the IEEE Signal Processing Society, and seeing that students have an opportunity to attend the primer signal processing meeting.

More details can be found at: <http://www.ieee.org/organizations/foundation/educationalfunds.html>

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## JPEG Innovations Workshop

FEBRUARY 23, 2011 IN TOKYO, JAPAN

Prof. Touradj Ebrahimi (MMSPG, EPFL) chaired the JPEG Innovations Workshop on February 23, 2011 in Tokyo, Japan, organized by JPEG committee.

The workshop featured invited speakers who gave talks on visions and plans for next generation digital photography products and services, as well as plans by JPEG on timely establishment of International standards that will help accelerate adoption of new products



and services by the market, benefiting industry and consumers.

The list of speakers included Prof. Hiroshi Yasuda (Tokyo DENKI University), Dr. Daniel Lee (eBay Inc.), Mikio Watanabe (FUJI FILM), Dr. Simon Sungho Cho (Master 3D Images), Walt Husak and Ajit Ninan (Dolby Labs).

For more information please consult the website: <http://mmspg.epfl.ch/page-58401-en.html>

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## Qualinet COST NoE

FEBRUARY 23, 2011 IN TOKYO, JAPAN

In March 2011, the first general meeting of the COST Network of Excellence (NoE) Qualinet, chaired by Professor Touradj Ebrahimi, took place in Lisbon, Portugal.

Qualinet brings together experts in the field of quality of multimedia experience, coming from academic and industrial institutions, from 23 European and 2 non European countries. The NoE aims at extending the notion of network-centric Quality of Service (QoS) in multimedia systems, by relying on the concept of Quality of Experience (QoE). The main scientific objective is the development of methodologies for subjective and objective quality metrics taking into account current and new trends in multimedia communication

systems as witnessed by the appearance of new types of content and interactions.

A substantial scientific impact on fragmented efforts carried out in this field will be achieved by coordinating the research of European experts under the catalytic COST umbrella.

For more information please consult the website: <http://www.qualinet.eu/>

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## News

### IM2 Summer Institute 2011

September 1-2 2011, Martigny

The IM2 Summer Institute will be held at the Idiap Research Institute in Martigny from September 1<sup>st</sup> to September 2<sup>nd</sup> 2011.

The focus of this year's Summer School will be scientific only. This event will be jointly organized with the scientific Idiap's 20<sup>th</sup> anniversary celebration. Invited researchers from IM2 and from the Idiap Research Institute will give talks on Thursday September 1<sup>st</sup>.

The IM2 Advisory Board and the Idiap Advisory Board will attend parallel sessions on Friday September 2<sup>nd</sup>. It will be a great and unique opportunity to meet these researchers during the breaks and during poster session on Friday afternoon.

The registration is now open. More information at: <http://www.im2.ch/summer-institute-2011>

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### Active participation of IM2 in a festival for children

Hérisson sous gazon, June 18, 2011, Charrat, valais

After the great success of the IM2 workshop at the previous edition of the Festival for children "Hérisson sous gazon" in 2010, IM2 will be represented again this year, on Saturday June 18 in Charrat (Valais).

Two other NCCRs, such as Affectives Sciences and MANEP (University of Geneva), which were interested in this event, will participate this year by organizing a scientific workshop for the young visitors.

At the workshop, IM2 will bring the robot NAO with the main objective to explain to young visitors the speech recognition, speech synthesis and scene analysis.

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### IM2 researchers organized a workshop at the IEEE International Conference on Automatic Face and Gesture Recognition

Santa Barbara, CA, on March 21, 2011

Oya Aran and Daniel Gatica-Perez (Idiap), together with Louis-Philippe Morency (University of Southern California) and Fabio Pianesi (Bruno Kessler Foundation), organized a workshop on Social Behavior Analysis at the IEEE International Conference on Automatic Face and Gesture Recognition (FG) in Santa Barbara, CA, on March 21, 2011.

The workshop featured two invited speakers (Jim Blascovich, UC Santa Barbara) and Javier Movellan (UC San Diego) and several talks on methods to analyze human behavior in social situations from images and videos. The workshop was supported by the European Marie Curie NOVICOM project.

More information at:  
<http://www.idiap.ch/~oaran/sba/index.html>

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### Paper Award

ETH-Computer Vision Lab

The Computer Vision Lab at ETH Zurich received the Elsevier 2011 Most Cited Paper Award for the journal Computer Vision and Image Understanding, for the article A. Ess, H. Bay, T. Tuytelaars, and L. Van Gool, "Speeded-Up Robust Features (SURF)", Volume 110, Issue 3, Pages 346-359.

Papers for this distinction are determined based on the highest number of cites, excluding self-citations, received for all journal articles published between the years 2008 and 2010.

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### Koemei one of the winners of venture leaders 2011

March 2011

For over ten years, the Swiss start-up team has been flying to Boston to learn about entrepreneurship. This year, Koemei SA will also attend this 10 day program in Boston, which includes the pitch competition with the US teams.

The company Koemei provides the world's first cloud based speech recognition solution specifically designed for multiparty conversations.

More information at:  
<http://www.koemei.com>

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## Selected publications

Towards High Efficiency Video Coding: Subjective Evaluation of Potential Coding Technologies.

F. De Simone, L. Goldmann, J-S. Lee, T. Ebrahimi

In Journal of Visual Communication and Image Representation, Special Issue on Emerging Techniques for High Performance Video Coding, 2011.

Subjective quality assessment of H.264/AVC video streaming with packet losses.

F. De Simone, M. Naccari, M. Tagliasacchi, F. Dufaux, S. Tubaro, T. Ebrahimi

In Eurasip Journal on Image and Video Processing, vol. 2011 Article ID 190431, 2011.

Introduction to Sequence Analysis for Human Behavior Understanding.

H. Salamin, A. Vinciarelli

In Computer Analysis of Human Behavior, A. Salah and T. Gevers (eds.), Springer Verlag, 2011.

A Fitt of distraction: Measuring the impact of distracters and multi-users on pointing efficiency.

D. Lalanne, A. Lisowska-Masson

In Proc. of ACM CHI Conference on Human Factors in Computing, Extended Abstracts (CHI EA 2011), Vancouver 2011