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INTERACTIVE
MULTIMODAL
INFORMATION
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The (IM)2 Newsletter

Every month the (IM)2 Newsletter brings you the latest and hottest
scientific and administrative news about the (IM)2 NCCR and related topics

Latsis Prize of the University of Geneva in multimodal interaction

Patrick Roth, former PhD student in the Computer Vision and Multimedia Laboratory, University of Geneva (thesis advisor Prof. Thierry Pun), has been awarded the Latsis Prize 2004 for his thesis entitled: "Représentation multimodale d'images digitales dans des systèmes informatiques multimédias pour utilisateurs non-voyants" (Multimodal representation of digital images in multimedia systems for sight-handicapped and blind users). The Latsis Prize, which is awarded once a year for one PhD thesis in any of the fields represented at the University of Geneva, is ceremoniously presented by the rector to the recipient during the official Dies Academicus.

Dr Patrick Roth receiving his award from the rector of the University of Geneva, Prof. André Hurst

This work concerns the usage of multimodal interaction (haptic, auditive) for letting blind users interactively explore images and drawings. The input devices can be a standard or a force feedback mouse, or a 3D force-feedback device such as the Phantom manipulator. The return information can be haptic via force-feedback, auditive via audio signals indicating topological and semantic features of the images, or audio-haptic. Experiments have also been conducted in order to represent visual information through moving sound sources in a virtual 3D audio space. The work has generated several prototypes, such as educational games, an augmented Web browser, and an image presentation tool. These prototypes have been extensively experimented by the users themselves.

In addition, the thesis contains a detailed study of the problem from various perspectives, such as psychology, cognitive science, and what one could call theoretical human-computer interaction.

This work was supported by (amongst others) the Geneva "Association pour le bien des aveugles et amblyopes", by the Swiss Priority Research Program in Computer Science, and by (IM)2. More details online at www.unige.ch/evenements/dies.

The Ark and IdeArk SA in the starting blocks

On July 1st, a press conference featuring State Councilor Jean-René Fournier, head of the Department of Economy, François Seppey, head of the Service of Economic and Touristic Development and president of the Foundation TheArk, Dr Jean-Claude Villettaz, head of R&D at the HEVs, and Dominique Perruchoud, director of CimArk (formerly known as CIMTEC) marked the official lauch of TheArk, the new instrument for supporting and fostering technology business development in the Canton du Valais.

From left to right: F. Seppey, J.-R. Fournier, D. Perruchoud, J.-C. Villettaz

IDIAP, as well as the major projects hosted by the institute are a major component of this initiative through the newly created IdeArk SA spin-off. The new company will be responsible for bridging research and industry, creating new partnership opportunitites, managing the institute's intellectual property, etc.

The increased collaboration between IDIAP and the other key players in information and communication technologies in Valais has already lead to several joint projects with the Haute Ecole Valaisanne (HEVs) as well as partnerships with local SMEs. The framework offered by TheArk will facilitate such collaboration in the future.

Acknowledging IDIAP's key role in the economic development of the Canton, the State Council has recently agreed to increase its annual contribution to the Institute.

More information on TheArk and IdeArk can be found on their respective web pages at www.theark.ch and www.ideark.ch. Dr Frank Crittin, in charge of Industrial relations at IDIAP will also coordinate IdeArk's activity.

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Events

(IM)2 Integration week   16–18.8.04
The (IM)2 Integration Week aims at stimulating the interaction between the (IM)2 doctoral students beyond frontiers of disciplines and cultures and to create the desire for transdisciplinary collaboration. Full details on the (IM)2 web site.

Comptoire Suisse   23.9.04
During the "journée des professionels de l'audio, vidéo et multimédia", a one-day event as part of the yearly Comptoire Suisse in Lausanne, IDIAP will present the latest trends in Multimedia information management and multimodal interfaces resulting from the research activities in the (IM)2 NCCR.

Foire du Valais   4.10.04
Monday, October 4, will be IDIAP's day at the Foire du Valais. The Institute will demonstrate its activities and projects to the public through a series of presentations. The final program will be announced at a later date.

SNSF Site Visit   18–19.11.04
The third annual Site Visit of the SNSF Review Panel will take place on November 18 and 19, 2004.

SIAB meeting   10–11.2.05
Next year's International Scientific and Industrial Advisory Boards meeting will be held on February 10 and 11, 2005.

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Joint AMI / PASCAL / (IM)2 / M4 Workshop on

Multimodal Interaction and Related Machine Learning Algorithms

Centre du Parc (www.hotelduparc.ch), Martigny, Switzerland, 21–23 June 2004

PASCAL

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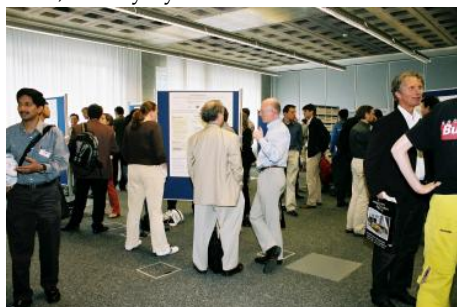
m4 MULTIMODAL MEETING MANAGER

MLMI 04

Building upon several large projects active at IDIAP, namely (IM)2, the Integrated Project AMI, and the Network of Excellence PASCAL, IDIAP took the initiative to organize a large joint international workshop and summer institute on machine learning and multimodal interaction, held in Martigny (Hotel du Parc) on June 21-23, 2004. Fully sponsored by (IM)2, AMI, and PASCAL, this workshop was a major success, involving more than 200 participants, mainly from the sponsoring projects (30% from (IM)2).

While including peer reviewed oral presentations (23), the workshop also included numerous (around 89) poster presentations, mainly by students.

The workshop also featured 9 invited talks from prominent speakers such as: Dr. Bill Buxton (Buxton Design, USA), Dr. Jordy Cohen (VoiceSignal, USA), Prof. Roddy Cowie (Queen's University, Belfast), Prof. Stephen Cox (University of East Anglia, UK), Dr. Jonathan Foote (FX Palo Alto Laboratory, USA), Dr. Rafah Hosn (IBM Research, USA), Dr. Mats Ljungqvist (EU representative), Dr. Nuria Oliver (Microsoft Research, USA), and Prof. Yorick Wilks (Sheffield University, UK).

A bit of Swiss culture to host the workshop barbeque.

A big thank you to (IM)2's Program Manager Nancy Robyr for the smooth operation of the workshop's administration.

The workshop was considered by all attendees as a major success in terms of scientific quality, networking, and opportunities for the students. The EC representative also heartily applauded the initiative, while encouraging other related EC projects to join the future MLMI events. The Proceedings of this first MLMI workshop will be published as a book by Springer, as part of the Lecture Notes on Artificial Intelligence (LNAI).

Based on the exceptional success of this first workshop, several candidates volunteered to organize the future MLMI workshops, which will all involve (IM)2 as one of the major players. NIST also expressed their interest to join MLMI and their "Rich transcription and meeting recognition workshop". Consequently, it has already been decided that the next MLMI'05 would be held in Edinburgh, jointly with the NIST workshop, while MLMI'06 would be organized by NIST and held in the US.

The whole workshop was recorded, to provide further raw material for meeting processing.