

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

The 2002 Summer Institute

The first major (IM)2 event took place on October 3 and 4 at the Centre du Parc in Martigny. More than 90 scientists involved in (IM)2 through one or several individual projects (IP) or white paper projects (WP) attended this two day workshop. Both days opened with presentations on the content and status update by the relevant IP heads, followed by a selection of talks. The full program and the presentation files are available on the (IM)2 web site.

Last but not least, the invited talk by Prof. Hans Burkhardt, University of Freiburg (Germany) on "*Invariants for 2D and 3D pattern recognition problems: New results for a classical problem*" offered a good perspective for the people involved in (IM)2.SA.

Beyond technical talks, the opportunity given to the (IM)2 community to meet and exchange ideas was greatly appreciated. While most teams existed long before the start of the NCCR, many new people have joined them recently thanks to the support of (IM)2. Furthermore, the Summer Institute allowed people from different teams in different institutions to get together in person, improving on the exchange of emails.

Towards an (IM)2 Media File Server

As expected, this networking drew attention to some gaps in the workplans. In particular, the question of adding annotation to the Smart Meeting Room recordings is pending, but most importantly, it became apparent that the distribution of recorded meeting data required some attention.

A meeting between the heads of (IM)2.DS, Prof. Hersch and Spaccapietra, responsible for the deployment, storage, and interactive access of multimodal data, and the people involved in IDIAP's Smart Meeting Room was quickly set up. It was agreed that a Media File Server was required to serve the (IM)2 community and would be setup within the next few weeks.

The SNSF Site Visit

Two weeks after the Summer Institute, the (IM)2 NCCR hosted another very important event: the Site Visit of the Review Panel appointed by the Swiss National Science Foundation to assess the setting up of the NCCR.

The organization of this two day visit is the responsibility of the SNSF. The program included many opportunities for the review panel's private discussions, but the afternoon of the first day was dedicated to presentations by some representatives of the NCCR. To this extent, the IP heads agreed, at the end of the Summer Institute, on a selection of talks to give the panel members a broad view of the major activities in the NCCR.

The Site Visit, in addition to the annual progress report submitted at the end of September, is the major instrument in the hands of SNSF to exercise its control over the NCCR. It is also an important source of guidelines for the NCCR management: while the Review Panel reports to the SNSF in strict confidentiality, the SNSF provides feedback based on this report and its own critics.

Events

EC's 6th Framework Program

2002 marks the end of the European Commission's 5th Framework Program which funded many projects in which (IM)2 people are also involved (see issue 07 of the (IM)2 Newsletter for a brief description of some of them). In 2003, the 6th Framework Program will take over with a new set of instruments and updated research objectives. Although the Program has not yet been formally approved, it is expected that several (IM)2 research areas will be among the strategic objectives of the first call due before the end of the year. No doubt some of the key players of (IM)2 will be involved in these new projects.

Several information days about the 6th FWP have been and will be held, see for example www.konferenz6frp.ch.

IEEE ICASSP 2003 6-10.04.03

Next year's IEEE International Conference on Acoustics, Speech, and Signal Processing will be held in Hong Kong and will feature a special session on Smart Meeting Rooms organized by Hervé Broulard, Daniel Gatica-Perez, Iain McCowan and Pierre Wellner.

The talks scheduled for that special session are: "*The NIST Smart Space Project*" by Vince Stanford, NIST; "*The Smart Meeting Room Project at IDIAP*" by Hervé Broulard, IDIAP; "*Perceptual User Interfaces in Contextually Aware Meeting Rooms*" by Alex Waibel, CMU; "*Meetings about meetings: research at ICSI on speech in multiparty conversations*" by Nelson Morgan, ICSI; "*Audio Information Access From Meetings*" by Steve Renals, Sheffield University; "*Distributed Meetings: A Meeting Capture and Broadcasting System*" by Ross Cutler, Microsoft Research.

More information about ICASSP 2003 can be found on the web at www.eie.polyu.edu.hk/icassp03/.

(IM)2 Summer Institute 2003

Given the success of the first edition, there will be a 2003 edition of the (IM)2 Summer Institute, probably again in early October. Full details will be announced when available.



The Signal Processing Institute at EPFL

The Signal Processing Institute (ITS) in Lausanne, Switzerland has been created in January 2001 as an extension of the Signal Processing Laboratory (LTS) existing since 1972. It includes today the former Integrated system laboratory and the Visual information representation group. ITS at the forefront of the digital age for a generation. It is now Europe's most prestigious signal and image processing research Institute. Today's ITS engineers and researchers will lead many of the world's newest industries in the new century. A primary commitment of the ITS is always to open and expand its horizons by working with new corporate partners in developing new knowledge, products, and processes.

Integrating theory and research into practical applications for the global digital and electronic industries, the ITS is perfectly placed to help new corporate partners achieve leadership positions in new product markets.

The ITS is a global trailblazer in the vanguard of technology's cutting edge as available computing power and memory expand. As part of the Swiss Federal Institute of Technology, Lausanne (EPFL), its \$4 million (U.S.) annual budget comes principally from its many corporate partners and sponsors. Since the late 1980s, the ITS budget has increased by more than a factor of ten.

With the entrepreneurial spirit characteristic of many great U.S. research institutes, the ITS offers multiple opportunities to create, nurture, and grow new businesses.

A global colleague and alumni network of world-class research engineers strategically supports the wide range of ITS projects and investigations.

The ITS is currently involved in some 40 different international R&D projects, including the NCCR (IM)2. ITS staff members have authored 17 books and several hundred journal articles. The ITS counts an average of three new worldwide patents per year, with a progressive annual increase planned for the future.

A hallmark of the ITS is its constant eagerness to respond to new industrial challenges. The high quality of ITS research, its wide international collaboration in publications and conferences, and its unflinching commitment to balance fundamental and applied research reinforce its pioneering role in new fields and new educational approaches.

While the application areas of ITS research and development are wide and varied, they are organized into five fields of major emphasis:

Image and video processing: video image analysis for surveillance and inspection; medical image processing, aerial image analysis, compression

Speech processing: recognition, synthesis

One dimensional signal processing: learning, dynamic systems, prediction, modeling

Pattern recognition: computer vision, recognition

Multimodal systems: Combining, audio, video, images and data, smart video conferencing

The LTS maintains a close collegial network with important European and Asian academic centers as well as with such leading North American universities as Berkeley, Columbia, MIT, McGill, Stanford, and the University of Southern California. The work of the LTS overlaps most notably with that of the Media Lab at MIT and the Signal and Imaging Processing Institute (SIPI) at U.S.C.

Many ITS alumni are now with AT&T Bell Labs, Hewlett-Packard, IBM, Intel, Logitech, Microsoft, Motorola, National Institute of Health, Nokia, Rockwell, and Thomson.

Professor Murat Kunt is director of the ITS. The multi-lingual, multi-cultural staff includes 5 professors, 15 Ph.Ds, 40 Ph.D. students/research assistants, two systems engineers, a technician, six administrative assistants, and 40 exchange student trainees. Since the late 1980s, the total staff has increased by more than a factor of five.

In the first decade of the new century, the ITS plans to continue its expansion by addressing the growing research and development needs of the burgeoning digital and electronics industries.

The ITS has conceived, designed and developed from scratch the following successful commercial products: Double frequency ultrasound scanner, Zero false alarm intrusion detector, Test pattern generator for codec evaluation and Image and video watermarking.

The Signal Processing Laboratory enjoys a world class reputation for ground breaking research at the highest level. Its globally successful alumni and annual funding renewals from corporate partners attest to its level of excellence.

For more information, please consult the ITS website at ltswww.epfl.ch.

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