

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

Prof. Stephen Cox at IDIAP

Prof. Stephen Cox, from the School of Computing Sciences, University of East Anglia, will spend the month of June on sabbatical at IDIAP. During that time, he will be one of the invited speakers at the workshop on multimodal interfaces and related machine learning, and he will give a series of lectures on

- Overview of speech/language research work at UEA
- Speaker adaptation
- Evaluating speech recognisers
- Confidence measures in speech recognition
- Audio-visual speech recognition
- Constrained speech translation
- Call-routing

IDIAP ranked first in international biometric competition

IDIAP participated in an international competition of face verification algorithms, recently held in the context of the upcoming International Conference on Biometric Authentication (ICBA, Hong Kong, July 2004). The contest included two different tasks: face verification assuming perfect (manual) localization (less realistic scenario, but focuses only on verification) and face verification with automatic localization (more realistic scenario). The database used for the competition was the recent multi-modal BANCA database, using the so-called MC configuration (training and test face images were recorded in the same controlled environment).

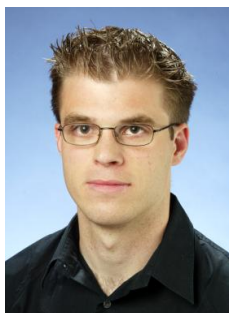
7 systems were registered, but 1 of them decided to withdraw after looking at their poor relative results. The 6 resulting systems were presented by IDIAP (2 systems), Université Catholique de Louvain (UCL, 2 systems), Titanium Technology Research Centre, and University of Surrey. UCL ranked first for the manual task (while IDIAP arrived second), and IDIAP came first for the more realistic automatic task.

Congratulations to the IDIAP team, which included Samy Bengio, Fabien Cardinaux, Krzysztof Kryszczuk (from EPFL), Sebastien Marcel, Norman Poh, Yann Rodriguez and Conrad Sanderson.

News from ICSI visitors

Last year (issue 12) we ran a short interview with Jitendra Ajmera and Micha Hersch who were the first two students to benefit from the (IM)2-ICSI exchange agreement. Sebastien Coquoz, from EPFL, now finishing his time at Berkeley, shares his experience with us. Dr Vincenzo Pallotta, at ICSI for a year, was not available, but we look forward for an interview with him in a future edition.

There is an open call for positions and fellowships at ICSI, see the previous issue or www.im2.ch/e/exchange.html for more details.



Sebastien Coquoz at ICSI.

What were you doing (and where) before you went to ICSI ?

SC: I was studying Electrical Engineering at the Swiss Federal Institute of Technology (EPFL).

Where did you learn about the IM2-ICSI exchange program ?

SC: I was willing to do my diploma work abroad. As I was interested in working in the speech recognition field, I got in touch with Prof. Bourlard who told me about this exchange program.

Did you know ICSI before ?

SC: No, I didn't.

What project are you working on at ICSI ?

SC: Broadcast News segmentation using Metadata and STT information to improve speech recognition. In the framework of the EARS (Effective Affordable Reusable Speech-to-text) program, I'm using these two types of information to segment the Broadcast News audio stream and give more "digestible" pieces to the recognizer.

How does your work contribute to ICSI and how does your work at ICSI fit into your original project ?

SC: The subject of my work wasn't determined before I arrived at ICSI. As I was willing to do something that was useful to both ICSI and me, I spoke with researchers about different possibilities. The project I chose to work on is part of the EARS Rich Transcription task, program to which ICSI is participating actively.

Do you expect to keep in touch with the people you met at ICSI after you return to Switzerland ?

SC: Yes, I do.

What do you recommend to other people interested by the IM2-ICSI exchange program ?

SC: As the scientific environment at ICSI is certainly one of the best in the world, I can only advise them to try and get the chance to work in Berkeley. Moreover, the more they will interact with "local" researchers, the more they will benefit from their stay. Therefore, it may be better to come with a project of interest to some of the researchers at ICSI.

Anything else you would like to add ?

SC: I'd like to thank people from IM2 and ICSI for allowing me to work in that stimulating environment. To be able to do that in this wonderful part of the world is a bonus.

Thank you Sébastien and good luck for your future career!



www.im2.ch/e/exchange.html

Events

First International Workshop on Multimodal Interaction and Related Machine Learning Algorithms 21-23.6.04

The first Workshop on Multimodal Interaction and Related Machine Learning Algorithms, a joint initiative of the AML, PASCAL, (IM)2 and M4 projects, will be held in Martigny and organized by IDIAP on June 21-23. See www.idiap.ch/events/workshop-mlmi04 for the latest news. Deadline for submission: **22 April 2004**.

On June 21–23, 2004, the Centre du Parc in Martigny will host the first joint AMI PASCAL (IM)2 M4 Workshop on Multimodal Interaction and Related Machine Learning Algorithms. This issue's backpage features the updated announcement and call for papers.

Issue N° 24

April 2004

Editor: Jean-Albert Ferrez

www.im2.ch/ni ni@im2.ch



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



AMI (Augmented Multipart Interaction, www.amiproject.org) is a newly launched (January 2004) European Integrated Project (IP) funded under Framework FP6 as part of its IST program. AMI targets computer enhanced multi-modal interaction in the context of meetings. The project aims at substantially advancing the state-of-the-art, within important underpinning technologies (such as human-human communication modeling, speech recognition, computer vision, multimedia indexing and retrieval). It will also produce tools for off-line and on-line browsing of multi-modal meeting data, including meeting structure analysis and summarizing functions. The project also makes recorded and annotated multimodal meeting data widely available for the European research community, thereby contributing to the research infrastructure in the field.

PASCAL (Pattern Analysis, Statistical Modelling and Computational Learning, www.pascal-network.org) is a newly launched (December 2003) European Network of Excellence (NoE) funded under Framework FP6 as part of its IST program. The NoE brings together experts from basic research areas such as Statistics, Optimisation and Computational Learning and from a number of application areas, with the objective of integrating research agendas and improving the state of the art in all concerned fields.

(IM)2 (Interactive Multimodal Information Management, www.im2.ch) is a Swiss National Center of Competence in Research (NCCR) aiming at the advancement of research, and the development of prototypes, in the field of man-machine interaction. (IM)2 is particularly concerned with technologies coordinating natural input modes (such as speech, image, pen, touch, hand gestures, head and/or body movements, and even physiological sensors) with multimedia system outputs, such as speech, sounds, images, 3D graphics and animation. Among other application, (IM)2 is also targeting research and development in the context of smart meeting rooms.

M4 (Multi-Modal Meeting Manager, www.m4project.org) is an EU IST project launched in March 2002 concerned with the construction of a demonstration system to enable structuring, browsing and querying of an archive of automatically analysed meetings. The archived meetings will have taken place in a room equipped with multimodal sensors.

Given the multiple links between AMI, PASCAL, IM2 and M4, it was decided to organize a joint workshop in order to bring together researchers of the different communities around the common theme of advanced machine learning algorithms for processing and structuring multimodal human interaction in meetings.

Call for papers

In the framework of this workshop, all participants in the above projects (AMI, PASCAL, IM2, M4), as well as external contributors, are invited to submit full papers for oral or poster presentation (see guidelines below) in the following areas of interest, related to the context of meetings:

- human-human communication modeling
- speech and visual processing
- multi-modal processing, fusion and fission
- multi-modal dialog modeling
- human-human interaction modeling
- multi-modal data structuring and presentation
- multimedia indexing and retrieval
- meeting structure analysis
- meeting summarizing
- multimodal meeting annotation
- machine learning algorithms applied to the above

Guidelines for submissions

The format of the full papers should follow the IEEE 2-column standard (see details and template files on the workshop web site) and be of no more than 6 pages. The best papers will then be published in an edited book. Alternatively, one-page abstracts can also be submitted for poster sessions (but will not be considered for publication in the book).

Programme Committee

- Samy Bengio, IDIAP
- Hervé Bourlard, IDIAP
- Jean Carletta, Univ. Edinburgh
- Phil Green, Univ. Sheffield
- Jan Larsen, Technical Univ. of Denmark
- Nelson Morgan, ICSI Berkeley
- Erkki Oja, Helsinki Univ. of Technology
- Barbara Peskin, ICSI Berkeley
- Thierry Pun, Univ. of Geneva
- Steve Renals, Univ. Edinburgh
- John Shawe-Taylor, Univ. Southampton
- Steve Whittaker, Univ. Sheffield

Invited Speakers

- Bill Buxton, Buxton Design
- Jordy Cohen, VoiceSignal
- Roddy Cowie, Queen's University, Belfast
- Stephen Cox, University of East Anglia
- Jonathan Foote, FX Palo Alto Laboratory
- David Nahamoo, IBM Research
- Nuria Olivier, Microsoft Research
- Yorick Wilks, Sheffield University

Sponsoring

This workshop will be jointly sponsored by the AMI, PASCAL, IM2 and M4 projects, which means that there will be no registration fees for members of those projects. In addition, a number of student grants to cover extra cost, such as travel and housing, may also be available on request.

Important dates

Submission deadline: **22 April 2004**
Notification of acceptance: **22 May 2004**
Registration deadline: **10 June 2004**
Workshop date: **21–23 June 2004**

www.idiap.ch/events/workshop-mlmi04