Newsletter

Contents

News

Community of Interest Workshop

May 14-15, 2009

The next Community of Interest Workshop will be held at the University of Edinburgh Informatics Forum, Scotland

http://www.amiproject.org/ ami-community-of-interest- workshop-2009

Enhancement of Remote Participation in T-Xchange Meetings

MINI-PROJECT: THE UNIVERSITY OF TWENTE AND T-XCHANGE

An AMIDA Mini-project in which AMIDA's remote meeting support technology will be applied in a practical setting has just started in January at the University of Twente in Enschede, the Netherlands. Partners in the project are the Dutch AMIDA COI-member T-Xchange and the Human Media Interaction research group led by Professor Anton Nijholt of the University of Twente.

T-XChange's core business is to support complex group decision making processes through methodological and technical means. Serious gaming plays an import role in assessing implications of solutions proposed by the group. Presently a group, with the facilitator, meets in one laboratory - called TX-Cell. T-XChange has TX-Cells in

Enschede, Delft, Huizen, Den Haag, Paris, Pretoria and Singapore.

The HMI group of the UT has developed prototypes of a system for the synchronised recording, exchange, presentation and storage of audio and video streams between various sites as well as prototypes for remote meeting support technology using AMIDA technology for multimodal content recognition (speech, gestures etc).

The aim of this project is to apply the ideas and technologies for remote meeting support in the setting of T-Xchange meetings so that individuals located elsewhere can connect with a TX-Cell.

Cover Story

Newsletter

Enhancement of Remote Participation in T-Xchange Meetings (continued)

A second aim is to investigate how the facilitator can be supported by AMIDA technology in controlling the process in the TXCell-to-Remote Participant setting.

T-Xchange can support, speed up and create breakthroughs in complex multi-actor problem solving processes. T-Xchange facilitates the interaction between stakeholders in defining a vision, the articulation of needs and criteria and the collaborative design of a concept for a solution to the shared problem.

It makes use of advanced visualisations and serious gaming to moderate and stimulate the interaction between stakeholders, to visualize design choices and trade – offs in decision making by (in real-time) computing effects on environmental, economical and social criteria of acceptance. The serious games simplify the complex reality and help to get a grip on implications of solutions proposed by the group.

One problem that occurs is that it is very hard to get all the required stakeholders at the same place at the same time. Tools that enable remote participation could form a partial solution to this problem. Some of the requirements to be able to use such tools for T-Xchange meetings are:

- **High feeling of social presence**. The nature of the tasks (intellective, decision making, cognitive conflict and mixed-motive tasks) that are preformed during the T-Xchange meetings requires high social presence of the remote participant.

- **Support technology for the moderator**. We want to investigate how the moderator can be supported by AMIDA technology in controlling the process in the TXCell-to-RP setting.

- **Shared views and tools**. As described above, visualisation during TX-meetings is very important. The remote participant should be able to be provided with the same visualisations and should be able to use the same tools (brain writing, brain sketching and file browsing tools) as the non-remote participants.

- **Design**. The interfaces of the remote participation tool should be designed to fit in the TX-Cell environment.

- **Usability**. The interfaces and interaction should be efficient and pleasant to use.

The mini-project will allow T-XChange to:

- develop specifications of requirements for AMIDA tools which can be used by T-Xchange users and process facilitators,

- develop tools that meet the requirements and needs of T-Xchange,

- test the tools/prototype based on AMIDA concepts and technology in real-life settings, and

- provide feedback to the project regarding findings during test phase and where/how to best continue/expand research.

For more information about this work, please contact Rieks op den Akker, Human Media Interaction, University of Twente, *infrieks@cs.utwente.nl*

For more information about how to work with the AMI Consortium, contact Christine Perey at *http://www.amiproject.org/business-portal/contacts*

Rieks op den Akker,
University of Twente

AMI c/o Idiap Research Institute, Centre du Parc, Rue Marconi 19, P.O. Box 592, CH-1920 Martigny,
info@amiproject.org - www.amiproject.org

2/4

Newsletter

Call for Papers : ACM Multimedia 2009 Workshop.
Searching Spontaneous Conversational Speech (SSCS 2009)
OCTOBER 23, 2009, BEIJING, CHINA, SPONSORED BY AMIDA

Multimedia content often contains spoken audio as a key component. Although speech is generally acknowledged as the quintessential carrier of semantic information, spoken audio remains underexploited by multimedia retrieval systems. In particular, the potential of speech technology to improve information access has not yet been successfully extended beyond multimedia content containing scripted speech, such as broadcast news.

The SSCS 2009 workshop is dedicated to fostering search research based on speech technology as it expands into spoken content domains involving non-scripted, less-highly conventionalized, conversational speech characterized by wide variability of speaking styles and recording conditions. Such domains include podcasts, video diaries, lifelogs, meetings, call center recordings, social video networks, Web TV, conversational broadcast, lectures, discussions, debates, interviews and cultural heritage archives. This year we are setting a particular focus on the user and the use of speech techniques and technology in real-life multimedia access systems and have chosen the theme "Speech technology in the multimedia access framework."

The development of robust, scalable, affordable approaches for accessing multimedia collections with a spoken component requires the sustained collaboration of researchers in the areas of speech recognition, audio processing, multimedia analysis and information retrieval. Motivated by the aim of providing a forum where these disciplines can engage in productive interaction and exchange, Searching Spontaneous Conversational Speech (SSCS) workshops were held in conjunction with SIGIR 2007 in Amsterdam and with SIGIR 2008 in Singapore. The SSCS workshop series continues with SSCS 2009 held in conjunction with ACM Multimedia 2009 in Beijing. This year the workshop will focus on addressing the research challenges that were identified during SSCS 2008: Integration, Interface/Interaction, Scale/Scope, and Community.

We welcome contributions on a range of trans-disciplinary issues related to these research challenges, including:

Integration
- Information retrieval techniques based on speech analysis (e.g., applied to speech recognition lattices)
- Search effectiveness (e.g., evidence combination, query/document expansion)
- Self-improving systems (e.g., unsupervised adaptation, recursive metadata refinement)
- Exploitation of audio analysis (e.g., speaker emotional state, speaker characteristics, speaking style)
- Integration of higher-level semantics, including cross-modal concept detection
- Combination of indexing features from video, text and speech

Interface/Interaction
- Surrogates for representation or browsing of spoken content
- Intelligent playback: exploiting semantics in the media player
- Relevance intervals: determining the boundaries of query-related media segments
- Cross-media linking and link visualization deploying speech transcripts

Scale/Scope
- Large-scale speech indexing approaches (e.g., collection size, search speed)
- Dealing with collections containing multiple languages
- Affordable, light-weight solutions for small collections, i.e., for the long tail

Community
- Stakeholder participation in design and realization of real world applications
- Exploiting user contributions (e.g., tags, ratings, comments, corrections, usage information, community structure)

Contributions for oral presentations (8-10 pages) poster presentations (2 pages), demonstration descriptions (2 pages) and position papers for selection of panel members (2 pages) will be accepted. Further information including submission guidelines will be published on the workshop website: *http://ict.ewi.tudelft.nl/SSCS2009*

Important Dates:
Monday, June 1, 2009 Submission Deadline
Saturday, July 4, 2009 Author Notification
Friday, July 17, 2009 Camera Ready Deadline
Friday, October 23, 2009 Workshop in Beijing

For more information: *m.a.larson@tudelft.nl*
SSCS 2009 Website: *http://ict.ewi.tudelft.nl/SSCS2009/*
ACM Multimedia 2009 Website: *http://www.acmmm09.org*

On behalf of the SSCS2009 Organizing Committee:
- Martha Larson, Delft University of Technology, The Netherlands
- Franciska de Jong, University of Twente, The Netherlands
- Joachim Kohler, Fraunhofer IAIS, Germany
- Roeland Ordelman, University of Twente, The Netherlands
- Wessel Kraaij, TNO, The Netherlands *(wessel.kraaij@tno.nl)*

Wessel Kraaij,
TNO

3/4

AMI c/o Idiap Research Institute, Centre du Parc, Rue Marconi 19, P.O. Box 592, CH-1920 Martigny,
info@amiproject.org - www.amiproject.org

Newsletter

News

New partner joining AMIDA
DECEMBER 31, 2009, END OF PROJECT

AMIDA has expanded to include a new partner: Noldus Information Technology *(http://www.noldus.com)*, a Dutch SME who develop software tools and integrated measurement systems for the study of behaviour.

Noldus Information Technology extends the existing consortium very well, with a focus on behavioural observation, annotation and multimodal signal integration, as well a providing some new and challenging application domains on which to test AMIDA technologies. These application domains include focus group, and social settings such as restaurants.

Noldus's main work in AMIDA will include connecting AMIDA technologies as prototype plug-in software components to Noldus Observer XT, their flagship software package for the collection and analysis of behavioural data, as well as practical testing of AMIDA technologies in new application domains.

To enable Noldus IT's participation in the project to have a real impact, and to enable the construction of demonstrations of the generalisability and adaptability of AMIDA technologies, the EC has agreed to extend the AMIDA project by 3 months to 31 December 2009.

Steve Renals,
The University of Edinburgh

Events

AMI Consortium Community of Interest Workshop

Witness AMI for yourself on May 14-15 2009, in Edinburgh.

Seeing and Hearing to Believe in Edinburgh, Scotland.

We write reports and tell you about our progress and research results, but it is best to see and hear AMI technology advances running before your very eyes.

For this reason the consortium organizes regular opportunities for Community of Interest members and the Friends of AMI (any company which is interested in our work) to be able to experience AMI achievements first hand.

Workshops are an opportunity to roll up your sleeves and get practical with the AMI experts. During the COI workshop the latest research results and emerging technologies, as well as our mature technologies, serve as the focal points for in-depth face-to-face meetings and demonstrations. Each participant will be provided a customized meeting schedule, designed to meet his or her unique needs and interests. This portion of the workshop's agenda is designed to foster collaboration in small groups and provides numerous hands-on demonstrations.

In the plenary presentations, workshop participants will hear our invited guest speakers who are members of the COI and discover:

- deeper context for our ongoing work,
- our vision for an integrated demonstrator
- our strategy for commercialization, and
- demonstrations of the results of COI mini-projects.

In order to achieve our objectives, the number of external (COI member and Friends of AMI) participants is limited to 35. Participation will be determined on a first come, first serve basis. Registration will close on April 30, 2009 and there is a 350 € fee.

For further information, visit *http://www.amiproject.org/ami-community-of-interest-workshop-2009*

If you have any questions, please contact Christine Perey at *cperey@perey.com*

Selected publications

Vision-Based Human Motion Analysis: An Overview.
R. Poppe
Computer Vision and Image Understanding, vol. 108(1-2), pp. 4–18, 2007.

Video Summarization at Brno University of Technology.
V.Beran, A.Herout, M.Hradis, P.Chmela'D, I.Potucek, S.Sumec and P.Zemcik
In ACM Multimedia, pages 16-19, Association for Computing Machinery, Augsburg, Bavaria, DE, 2007.

What Decisions Have You Made: Automatic Decision Detection in Conversational Speech.
P-Y.Hsueh and J. Moore
In Proceedings of NACCL/HLT 2007, 2007.

A generic layout-tool for summaries of meetings in a constraint-based approach.
S.Castronovo, J.Frey and P.Poller
In 5th Joint Workshop on Machine Learning and Multimodal Interaction (MLMI 2008), pages 248-259, Springer, Heidelberg, TNO, Utrecht, 2008.

A Keyphrase Based Approach to Interactive Meeting Summarization, Korbinian Riedhammer.
B.Favre and D.Hakkani Tür
In Proc. 2nd IEEE/ACL Workshop on Spoken Language Technologies (SLT2008), Goa, India, pages 153-156, Goa, India, 2008.

Annotations and Subjective Machines of annotators, embodied agents, users, and other humans.
D.Reidsma
Thesis, University of Twente, Enschede, 2008.

Automatic Speech Recognition for Scientific Purposes - webASR.
T.Hain, A.El Hannani, S.Wrigley and V. Wan
In proc. Interspeech, 2008.

Automatic Video Editing for Multimodal Meetings.
R.Kubicek, P.Zak, P.Zemcik, A.Herout
In Proceedings of International Conference on Computer Vision and Graphics 2008, pages 1-12, Springer Verlag, Heidelberg, DE, 2008.

Bob: A Lexicon and Pronunciaiton Dictionary Generator.
V.Wan, J.Dines, A.El Hannani and T.Hain
In Proc. IEEE Workshop on Spoken Language Technology, 2008, 2008..

Body-Part Templates for Recovery of 2D Human Poses under Occlusion
R. Poppe and M.Poel
In International Workshop on Articulated Motion and Deformable Objects (AMDO'08), pages 289-298, Springer-Verlag, 2008.

Combining Spectral Representations for Large Vocabulary Continuous Speech Recognition.
G.Garau and S.Renals
In IEEE Transactions on Audio Speech and Language Processing, volume 16-3, pages 508-518, 2008.

Dealing with Uncertainty in Microphone Placement in a Microphone Array Speech Recognition System
I.Himawan, S.Sridharan and I.McCowan
In Proceedings of 2008 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), IEEE Signal Processing Society, Nevada, US, 2008.