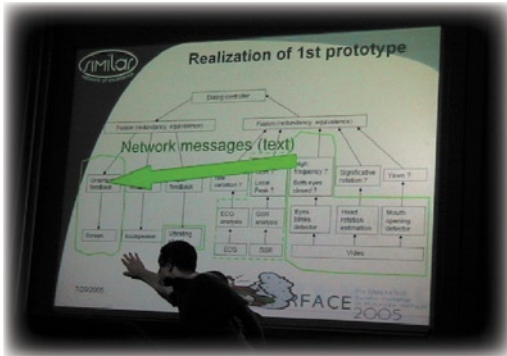


eNTERFACE 2005 Daily

Monday, August 1st

Half an eNTERFACE - Intermediate results -



Two weeks already gone! So many events happened in these two weeks that we were all suprised when we realised that the half of eNTERFACE summer workshop was reached.

Last Friday, we assisted to intermediate results presentation! Even if it is "summer time" with kind atmosphere between researchers, a lot of work has already been done in all of the seven projects. A strict planning with an efficient work share-out between team members led to promising interim results. First prototypes or interfaces have already been realised by solving some initial difficulties about hardware and unfortunately by discovering unforeseen issues. Cutting-edge techniques have been tried and we can briefly list some of them to let you appreciate the workshop level: hidden Markov models, optical flow, Kalman filtering, gaussian mixture models or human visual system-based filtering...

Moreover, during this mid-results day, several teams and organizers decided to create a multimodal database with eNTERFACE researchers. It will include face, gestures, signatures, voice and so on for each user. All these modalities will be acquired with high-quality hardware in a dedicated room of Faculté Polytechnique of Mons.

It is always awkward and difficult to choose everyday between people or projects to interview and today, we picked project #7 to highlight its interim results and on-going work.

Project #7 aims at building and manipulating 3D basic shapes in order to assembly virtual complex systems. To achieve this task, gesture and speech recognition are merged into an easy-to-use interface. France Telecom R&D already provided stereo vision-based gesture recognition. An additional model-based shape recognition module has been developed to transform the initial drawings into particular basic shapes. Main software commands including sketch completion will be controlled by voice while sketch transformation and shapes assembly are expressed by gestures.

The final shape assembly is provided by ITI (<http://www.iti.gr>). Initially working with haptic gloves, this software works now using gesture interpretation and vocal commands. The following work includes the set up of an english speech recognition for vocal commands and the obvious final integration. The shape transformation from 2D to 3D has also to be done and integrated in the final system. Kostas, the current project leader, is confident about the results and hopes to achieve an intuitive multimodal interface to easily design 3D complex objects from user's simple visual ideas.

This busy Friday was punctuated with several invited talks including tutorials and company presentation. Topics covered several fields from website ergonomics to digital music synthesis by going through human behaviour analysis. Finally the Acapela group, an European leading speech company from Mons, presented speech products such as SMS-to speech synthesis for example. For more curious people, see <http://www.acapela-group.com>.

All interim presentations and tutorials will be available online on the eNTERFACE website (<http://www.enterface.net> online documents headings).

Céline & Matei

Brugge 24 - Mons 23 - Canadian missing -



Brugge (say [b r @ G @]), as our guide insisted; for more details on the phonetics of Dutch, see <http://www.phon.ucl.ac.uk/home/sampa/dutch.htm>) was the ideal Belgian city to visit for this half-workshop social event.

The "Venice of the North", this great historic and romantic city has revealed a lot of its secrets, after the 2h30 guided tour proposed to our 24 eNTERFACE representatives. Chocolate shops were a shock to many of us (I suspect some of our livers will suffer from after effects long after eNTERFACE is closed). Surprise of the day : we met François's twin, Michel, whom Alexey really confused with his brother. No rain for this memorable journey (let us forgive the national weather for the few drops we got at some point), which ended with the



terrible loss of our Canadian member; the latest information we received was that Andrew is still touring in Brugge (see the picture), waiting for

an unlikely train to take him back to Mons .

Thierry