

eNTERFACE 2005 Daily

Thursday, August 4th

Computer music

This title, quite short, gathers many concepts we have been initiated to-day by passionate people. No musician at all, it was quite hard for us to write this subject. Do not blame us for possible misunderstanding! We really want to thank research-



ers for all interesting aspects they told us during the interview. In eNTERFACE, two projects deal with music and computer science, either human computer interaction (HCI) for project #6 or biological signals analysis for project #3. The main aim was to understand the link between music, artistic field and computers, scientific device. Actually, as described by Sylvain, Jean-Julien, Christophe or Andrew, the links exists from the beginning. For a long time, science has improved musical instruments to build very complex and cutting-edge instruments gathering all current breakthroughs. The first idea to put computers and music together for an artistic purpose was thought by Ada Lovelace, the first programmer (where the Ada language comes from). Now, the link is consistent and it is very rare to listen to music not processed at all by computers. They are ubiquitous in musical environments to write scores, to synthesize

or mix sounds, in musicology and so on. It is even so complementary that Christophe, professional organist, thinks that computer science courses are required for musicians nowadays. A field, computer music, with dedicated conferences appeared recently to complete this interference. Described that way, the link looks onefold but project #6 proves the contrary by using musical instruments as interfaces to improve HCI. In order for people to interact efficiently with computers, the interface needs to be transparent and able to capture each nuance and human expressivity. With training, good musicians can express themselves freely

and play music more easily. The idea is quite the same: by using an intuitive interface, people could interact with computers more efficiently. Musical keyboards are used as a controller to create prosody of a voice in project #6. Other user-

friendly interfaces are also investigated such as haptic gloves and they are interfaced easily thanks to the middleware, Max/MSP, used by all eNTERFACE musicians.

Nicolas expressed his conviction that computers are an extension of acoustic instruments. Guitarist for more than 15 years, he desired new sounds that his guitar could not render. Computers, the most powerful calculators nowadays, can surpass physical limitations of traditional instruments. They are able to produce similar acoustic sounds and to generate new ones, extending artists'

imagination. Sylvain agrees with this concept and that is why he is keen on CAM which stands for computer-aided music.

Nicolas and Julien think that the tactile information given by a musical instrument to the artist is missing in computers and is preponderant. For Nicolas, this is the reason why he cannot stop playing real guitar. Julien, guitarist and singer, choose his laboratory for this aspect. ACROEICA, located in Grenoble, France, works on the tactile feedback modelization to give back to artists this sensorial information. They designed a dedicated mechanical device to produce an equivalent feedback to the musician when he plays computer-aided music.

To be continued tomorrow ...

Céline & Matei

Trapped !

-Thriller after the movie-

Let us consider the end of the free projection of the "Simone" film. Let the audience leave from the auditoire 03 before the organizers. The last ones leave the FPMs buildings by the right way and all the doors are closed behind them until they are outside. Our international cinema-going adventurers leave the buildings by the wrong way and they are all trapped in the courtyard of the Faculty. Then add a sudden intense rain. This very funny story (funny depending on which side of the gate you are...) had a happy end: the dog of the Faculty gave the alert to a woman who could finally free our unlucky group.

