ERCIM "Alain Bensoussan" Fellowship Scientific Report

Fellow:Antonia Lucinelma Pessoa AlbuquerqueVisited Location:NTNU – Trondheim, NorwayDuration of Visit:12 months

I - Scientific activity

(1 page at maximum)

I prepared a questionnaire for testing perception on stereoscopic images and videos produced from my previous PhD work. The questionnaire had the goal of getting feedback from users about the model I had implemented based on human eye properties, when compared to the conventional model.

I wrote a paper approaching Networked media for family communication. The work presents an overview on how technologies have been approached in family context; shows some evidences of benefits in family life provided by new communication technologies and networked media; introduces concepts of Presence research and the results of some studies on Social Presence involving partners, friends and family in distance; comments the popular technologies that have been used by people and finally, introduces a framework based on Perceived QoS and multimodal perception, pointing out some research directions for improving the quality and efficiency of communication and networked media. The goal was to integrate my previous experience in Presence research with the areas of the Center, such as Networked Media and Quality of Experience. The paper was submitted to the IJHCS Journal, special issue on Family Communication.

I elaborated a study about quality perception of webcam images, during interaction with beloved, when people use popular software available on internet. The goal was crossing image quality perception with emotional involvement, getting users feedback from daily experiences. I travelled to CWI, in Amsterdam, for the first exchanging programme.

I worked on a case study of Social Presence for remote family members, analyzing on how simple technologies can afford Social Presence, what are the types of interaction that have been used for this mean, and the strategies they create to improve togetherness. The work points out positive aspects of those technologies; the needs and suggestions for future developments are based on scenarios of daily situations experienced by users. This work was presented and published as a Paper on the Proceeding of Presence 2008.

I attended a summer school on Presence research, Second Peach Summer School in Dubrovnik, Croatia, and presented a technical Poster.

I elaborated a project proposal to be developed in collaboration with the group I visited at CWI, and from that we discussed and sketched a paper.

I made some research on cross-modal perception and awareness systems for getting some literacy on those subjects.

Supervision of a Master student project on 3DTV.

I traveled to IMEC for the second exchange programme, in Leuven, Belgium. Attended the 11th International Workshop on Presence, in Padova, Italy, and presented a paper there.

II- Publication(s) **during your fellowship**

1. Title: When simple technology affords social presence: a case study for remote family members.

Authors: Antonia Lucinelma Pessoa Albuquerque and Andrew Perkis Paper presented at PRESENCE 2008, The 11th Annual International Workshop on Presence, 16-18 October, Padova-Italy. Published on the Conference Proceedings, Pgs: 291-296. ISBN 978-88-6129-287-1. Abstract:

This work explores how simple technologies are being adopted in family life as support for remote family members' interaction. We analyze the feeling of being closer to their remote relatives when using different types of interaction, based on users' report that live in countries geographically far from their families. The users' declarations reveal some benefits from those technologies. Our main goal is to bring insights and suggestions for future developments. By presenting the strategies that people create to improve their feeling of closeness, we expect to contribute to the conception of new technologies aiming to make this communication more effective.

2. Title: Networked Media as Support for Remote Family Members' Interaction. Antonia Lucinelma Pessoa Albuquerque, Andrew Perkis. Presented as Poster at the Second Peach Summer School, Dubrovnik, Croatia, July 2008.

3. Title: How Networked Media Can Improve Family Life in Distance. Authors: Antonia Lucinelma Pessoa Albuquerque, Fitri N Rahayu and Andrew Perkis. Paper Submitted in January 2008 to the International Journal of Human-Computer Studies, Special Issue on The family and communication technologies. Abstract:

Our main focus in this work is the communication with remote others over internet when there is emotional involvement. Communication among remotely located people is a subject of high focus nowadays but few emphasize the importance of networked media as support for remote family members' interaction and its benefits. This work presents an overview on how the impact of communication technologies upon family life has been investigated, shows evidence and examples of the benefits of networked media in family life, and suggests some results from Presence research related to emotional responses in remote interactions. After reviewing the most popular technologies available on the internet and other sophisticated developments to support remote interactions, we introduce a framework based on Perceived Quality of Service, what we call Quality of Experience, aiming to improve networked media efficiency and quality.

III -Attended Seminars, Workshops, and Conferences

Please identify the name(s), date(s) and place(s) of the events in which you participated during your fellowship period.

Second Peach Summer School, Dubrovnik, Croatia. 9 - 11 July 2008

PRESENCE 2008, The 11th Annual International Workshop on Presence, Padova, Italy. 16 – 18 October, 2008.

Along the year I attended the Q2S Colloquium, from visitors and internals.

IV – Research Exchange Programme (12 month scheme)

Please identify the name(s), date(s) and place(s) of your Research Exchanges during your fellowship period and detail them.

1st Research Exchange Programme:

CWI, Amsterdam, The Netherlands. 14 – 26 April, 2008.

During my stay I made one introductory talk about myself and my research, and attended presentations from the group about their work.

The Professor asked me to prepare a second presentation, one hour duration, like a tutorial about Presence, one of my research topics. And I also provided papers and material on that topic for future works of the group.

It was good interaction during my stay.

After the visit I exchanged some emails with the group, talking about a possible collaboration, proposed a project, and from that we started to sketch a paper to be written together.

2nd Research Exchange Programme: IMEC, Leuven, Belgium. 6 - 10 October, 2008.

I presented one hour talking about my work.

During the week I could interact with people and know better about their projects. The Professor gave me projects to read and we discussed about future evolutions of it.