ErgoIA'2014 –
"Design, Ergonomics and Human-Computer Interaction: what integration for interaction co-design?"
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Call for paper

Information and communications technologies (ICT) have slipped into everyday life sectors. Although the technical aspects benefit from extensive research, their application is not always the object of as much attention when it comes to the needs and specificity of the end users. Indeed, if technical constraints still pose challenges for the various applications domains of ICT, the one thing that has taken precedence over these difficulties is the quality of the interaction and the quality of the user experience. Needless to say that providing products and services tailored to the needs and characteristics of users has become an economic and social issue of prime importance.

This issue particularly challenges three areas: design, ergonomics and human-computer interaction.

Design is a discipline concerned with the conception of interfaces, devices, interactions and innovative services for uses through processes and approaches of creativity and innovation following a complexification and redefinition of the design problem. These solutions can take the form of products, but also interactions and experiences. This is called interaction design.

Ergonomics is the discipline dealing with understanding interactions between humans and other elements of a system. Like design, it is a profession that applies theories, principles, data and methods derived from its knowledge in order to optimize human well-being and performance of the system as a whole. Ergonomists contribute to the design and evaluation of tasks, products, working conditions and systems to make them compatible with the needs, abilities, possibilities and limitations of human beings. One finds in ergonomics, as in design, sub-disciplines, including ergonomics of products and services.

Human computer interaction (HCI) is the discipline devoted to the design, implementation and evaluation of interactive computing systems for human users in a given context. The interaction design approach of HCI is still little known in some disciplines and its importance underestimated.

Sometimes, software designers are more interested in the internal construction than in the software's intrinsic use. In fact, the most exploited programming languages were not designed for interactivity.

So, how do these disciplines that share common goals relate to one another? What are the methodological and epistemological differences? What type of impact these differences have on projects? Which role each actor has in projects driven by innovation? Is training adapted to these disciplines? What is the importance given to Ergonomics in Design and HCI? And what about the importance given to Design in HCI and Ergonomics? ...

The objectives of this edition of ErgoIA are to allow players from these three disciplines, both from the industry and the research field, to clarify their methods, discuss their practice and expertise, and

to propose means of interlocking. This should provide an opportunity for each discipline to learn about the fields of research and knowledge of the others, raising appreciation for their respective specificities. This mutual sharing and understanding should also facilitate cooperation in teaching, research and industrial partnerships for the interactive systems co-design (business applications, games, ...).

Key words

Industrial design, product design, service design, product ergonomics, service ergonomics, interaction design, Interactive design...

To the subjects generally addressed by ErgoIA, we will be adding themes this year:

- Needs analysis
- Activity analysis,
- Evaluation,
- ...

Papers will present original researches on methods, models, tools or assessment results to push knowledge forward concerning the conference topics.

More specific communications are expected on case studies of design-ergonomics-computing collaboration.

Communications will be received in different forms:

- Long articles (8 pages)
  - Position papers
  - Completed experimental studies
- Short articles (4 pages)
  - Experimental works or studies that are on-going
- Demonstrations
  - Informal communications (2 to 4 pages)

Long and short articles will be published in the ACM Digital Library.
Demonstrations will be published in the congress acts.

A long or short article can be paired up with a demonstration.

The official language is French. However, the publications and presentations in English are allowed. An extensive publication in French journals will be offered to the best papers. These journals could be, according to the topic of the paper, le *Travail Humain*, le *Journal d'Interaction Personne-Système* (JIPS) or le *Journal Européen des Systèmes Automatisés* (JESA).

* Please note that to be included in the ACM Digital Library, papers must absolutely comply and use the ACM template provided, including a summary, keywords, *ACM keywords* and *general terms* in English.

Dates to remember:

March 14, 2014: complete submissions
May 30, 2014: authors notifications
June 13, 2014: final version

Target audience

ERGO IA 2014 will provide a space favouring exchanges on how to interconnect design, ergonomics and HCI to conceive and develop interactions.

ERGO IA 2014 is open to all actors in these disciplines: teachers, researchers, practitioners and professionals.