

!! EXTENDED SUBMISSION DEADLINE

COGNITIVE VERSUS PHYSICAL DISAPPEARANCE OF COMPUTERS

WORKSHOP WS4 DURING THE i3 SPRING DAYS 2001

APRIL 25, 2001, PORTO, PORTUGAL

The proposed workshop addresses an emerging topic of great interest (especially to the i3 and Disappearing Computer projects): the disappearance of computers into everyday objects (artefacts). The aim of the workshop is to build on the results of previous workshops and will elaborate on two forms of artefact disappearance: cognitive and physical.

The term "**cognitive disappearance of computers**" refers to the "replacement" of the computer as an explicit tool in the mental model of its users. The mental models then do not distinguish computer from artefact, rather they distinguish the functions an artefact allows them to perform. In order to achieve this, functions have to be "advertised" by the computer in ways understandable by, and intuitive to, the users. The functions can then be distributed or regrouped in ways not anticipated by device designers. The physical existence of the computer will of course have an effect on the cognitive disappearance patterns, which motivates the second topic of the workshop.

The term "**physical disappearance**" describes the trend of embedding information-processing capabilities into previously computer-neutral everyday objects. Thus, the resulting artefacts become able to communicate with their environment and to exhibit interactive behaviour. Nowadays, the trend to distribute not only the processing power, but also the physical presence of computers is emerging. Different patterns of distribution are being tested and applied, which take into account several factors (cognitive, usability, marketing, etc).

Two discussion tracks are envisaged:

- The investigation of whether patterns of disappearance, which emerge in other disciplines (such as architecture, software etc) could also appear in the domain of artefacts. Issues to discuss include: the ways artefacts manifest their capabilities (and the ways in which could be used); the ways designers or users configure their environment simply by being part of it; and the interaction of users with an artefact-rich environment and the cognitive processes it stimulates, etc.
- The trade-off to be achieved between the two forms of disappearance and its obvious impact on the designers, developers and users of artefacts. Issues to investigate include: the factors that affect the final decision (be it a decision to design or to buy an artefact) from the viewpoint of all stakeholders (that is, designers, developers and users); and the relationship between design patterns and usage patterns, the ways that design patterns can be "embedded" in the design of artefact behavior, etc.

Extended abstracts (3-4 pages) or full papers (up to 10 pages) on these subjects may be submitted

to either of the organizers by **February 28, 2001**. The abstracts and papers will be reviewed by a panel of international experts and the authors will be notified of acceptance by **March 20, 2001**. Final versions of papers, if necessary, are due by March 30, 2001. The organizers are currently in discussions with Springer-Verlag to publish the results of the workshop together with selected contributions (as full papers).

Authors of selected papers are expected to register for i3 spring days 2001 and present their work during the workshop. Presenters of selected material will be encouraged to use whichever means appropriate (oral presentation, file, drama, etc) to convey their points. Contributions that present an overall approach, highlighting the emergence of patterns across disciplines, as well as scenario-based approaches, are encouraged.

If you are interested in presenting your ideas, please send via e-mail an abstract or paper to either of the organizing committee by 28th of February, 2001. If you are interested in participating in the workshop, please inform the organizers by e-mail and register via the i3 spring days pages (see bottom of page).

INVITED SPEAKERS

The organizing committee are pleased to announce that two distinguished scientists will share their views with the workshop participants:

Dr. Dr. Norbert A. Streitz, German National Research Center for Information Technology, Integrated Publication and Information Systems Institute, GMD-IPSI, GE (url: <http://www.darmstadt.gmd.de/~streitz>), who will give a talk on the subject "**Why Should Computers Disappear ? - Towards a Taxonomy of Disappearance**"

Dr. Alan Munro, University of Strathclyde, UK (url: <http://www.cs.strath.ac.uk/~alan/>) (subject of talk will be announced)

ORGANIZING COMMITTEE

Prof. Paddy Nixon, University of Strathclyde, UK (e-mail: paddy@cs.strath.ac.uk)

Dr. Achilles Kameas, Computer Technology Institute, GR (e-mail: Achilles.Kameas@cti.gr)

Mrs. Irene Mavrommati, Computer Technology Institute, GR (e-mail: irene.Mavrommati@cti.gr)

IMPORTANT DATES

Submission of extended abstracts / full papers	28 February 2001
Notification of acceptance	20 March 2001
Date of the workshop	25 April 2001

LINKS



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