

4th Workshop on Software and Usability Engineering Cross-Pollination: Usability Evaluation of Advanced Interfaces

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Abstract. The usability evaluation of advanced interfaces such as intelligent, adaptive and context-aware interfaces presents several challenges. These interfaces need to be evaluated over an extended time period and used in their actual context of use, rather than in a laboratory setting. Usability evaluation methods for traditional interactive systems have been extensively researched and are well understood. These methods include heuristic evaluation, usability testing and field studies. The goal of this workshop is to bring together people who are engaged in the design and evaluation of advanced interfaces across different disciplines. The objective is to exchange ideas and techniques relevant to the usability evaluation of advanced interfaces and to establish guidelines for the evaluation of such interfaces that cross-pollinate the different disciplines.

Keywords: Usability Evaluation, Advanced Interfaces, Guidelines

1 Introduction

HCI experts, software engineers and usability engineering are affected by a mutual influence that we call “cross-pollination”. Examples are task specifications, design patterns and life cycle models. These examples were invented in one field and later on adapted in a new context. New developments in intelligent and adaptive environments and mobile computing require new solutions, especially for usability evaluation methods [1-4]. The key attribute of advanced interfaces is that they need to adapt to time, location and usage which makes them very difficult to evaluate using standard techniques [5-8].

The workshop will focus on how to integrate and extend traditional evaluation methods in order to optimally evaluate the usability of advanced interfaces in their specific context of use [9, 10]. Experts in HCI, software and usability engineering need to learn from each other to facilitate and encourage this convergence.

The workshop aims to be a forum for sharing ideas about potential and innovative ways to cross-pollinate the expertise among the different communities and to show examples, which can stimulate industrial software development. Additionally it should provide a forum that will help to grow a community of interest in this area.

2 Structure of the workshop

2.1 Goals and topics

The goals of this workshop are to provide HCI specialists, software engineers and usability specialists from industry and research institutions an opportunity to discuss both the state-of-the art and the cutting edge practice in usability evaluation.

Topics of interest include, but are not limited to, the usability evaluation of the following advanced interfaces and interactive systems:

<ul style="list-style-type: none"> • Adaptive Interfaces • Context-aware Interfaces • Human-Robot Interfaces • Intelligent Interfaces 	<ul style="list-style-type: none"> • Location-aware Interfaces • Mobile Interfaces • Novel Interfaces
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2.2 Participation

The workshop is the official workshop of IFIP working group 13.2 "Methodologies for User-Centered Systems Design". http://wwwswt.informatik.uni-rostock.de/IFIP_13_2/

It expects HCI specialists, software and usability engineers from academia and industry as participants.

2.3 Workshop activities and dissemination

Participants have to prepare a position paper of 4 to 10 pages which will be reviewed. Selected papers will be published on the workshop web site (<http://wwwswt.informatik.uni-rostock.de/EVAL/>) and will be presented during the one day workshop. The outcome of the workshop will be a white paper presented on the web site of the workshop.

2.4 Workshop organizers

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