Workshop "Wearable Computer and Human Factors"

Abstract

The workshop "wearable computers and human factors" will be given at the ISWC symposium in october 2001 in Zurich. The participants are given basic information on factors, which must be considered if wearable computer shall hit human needs. Subsequently participants will be given the opportunity to compare properties of several commercial wearable computers during the practical part of the workshop.

The workshop takes half a day and is held on condition that enough participants register. Subject to alterations.

Workshop concept

Overview

The workshop deals with the subject "wearable computers and human factors". The participants shall have the opportunity to experience the ergonomy and usability of wearable computers. In this way the workshop can be seen as a platform for exchange of experience among potential users, scientists and manufacturers.

Content

1. **Theory:** The lectures give a survey about the current state of applied vision research and ergonomics, specially in the field of wearable computers with focus on visual requirements in wearable computing, ergonomic product design and input and navigation devices. The lectures take into consideration the most important trends, projects and products.

Application: The participants will be given the possibility to solve a realistic exercise using a wearable device. The following aspects will be evaluated by the instructor team: a) quality of the solution, b) suitability of the device for the given purpose. The evaluation is supported by a multiple choice questionnaire (with space for suggestions and remarks). Provided there will be enough time, the same exercise should be solved and evaluated using devices of different manufacturers.

2. **Results:** The results of the evaluation including remarks and suggestions will be discussed during the workshop and will be published as a paper in a relevant journal.

Intended audience

All symposium participants, who are interested in "wearable computer and human factors" are welcome to join us. There are no special requirements concerning experience level or prerequisites.

Instructor's Qualifications

Marino Menozzi has a diploma in physics. His doctorate thesis deals on visual-ergonomics of visual displays. He received his "venia legendi" (professor) from the Swiss Federal Institute of Technology (ETH) in 1999 for the topic "human factors". In the past 18 years Marino Menozzi completed a variety of research on human factors. His research work is almost completely supported by industrial sponsors. Further information is available under <u>www.iha.bepr.ethz.ch/pages/leute/menozzi/menozzi.htm</u>.

Elke Reuss studied electrical engineering at the Swiss Federal Institute of Technology (ETH) and received her diploma in 1991. She also has a masters degree in didactics and education and a bachelors degree in law. For the last ten years she has been working as a teacher and in the field of documentation and quality management in a software company. Currently she is working at the Institute of Hygiene and Applied Physiology as a PhD student. Her doctoral thesis "Medical Information Systems" deals with new techniques for navigation and visualisation of medical data and information.