



### The Observer XT in HCI research

#### INSTRUCTOR RESUME



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Presenter has previously taught similar courses at CHI 2004, CHI 2005, MobileHCI'05, CHI 2006, CHI 2007, and HCI International 2009.

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#### BENEFITS OF THE TUTORIAL

In this tutorial you will learn how to design, execute and analyze observational studies in the context of HCI research and usability testing. This includes how to configure and use the software tool The Observer XT in various stages of the research and development process, from field observations to summative usability tests. The tutorial will end by examining how to combine observational data collection with other techniques, such as eye tracking and physiological data acquisition.

#### FEATURES

Topics covered in this tutorial:

- Designing the coding scheme
  - From basic to elaborate, from generic to specific, best practices
  - Freeform annotation vs. structured event logging
  - Translating a research question into a coding scheme
  - Optimizing the coding scheme to make scoring easier
- Data collection
  - Real-time logging
  - Post-test annotation
- Multimodal measurements
  - Eye tracking, physiological data acquisition, keystroke and mouse logging
  - Combining The Observer with other data collection tools: synchronization of measurements, data import
  - Integrated visualization of video streams, events and signals
- Analyzing observational data
  - Qualitative analysis: reviewing tests, creating video highlights
  - Quantitative analysis: computing performance measures and usability metrics
- Design a simple and effective coding scheme for both qualitative and quantitative data collection.

### AUDIENCE

This course is intended for human-computer interaction researchers and usability practitioners (usability engineers, UI designers, usability testers) who wish to take advantage of The Observer XT to enhance the quality of their measurements and the efficiency of their projects. The course is useful for people working in academic research, corporate human factors groups as well as independent consulting firms.

Both novices and experts can benefit from this course. For instance, the novice will learn the basic of event logging while the expert will learn how to integrate video with observational and psycho-physiological measures.