

Proposal

Title of the Workshop: Getting Satisfaction from Eyetracking

The Topic

Eyetracking is now an almost standard offering from commercial HCI analysts. However, what are the best ways to exploit the strengths and minimise the weaknesses of this technique? This workshop aims to gather individuals who have an interest in using eyetracking for the evaluation and design of digital interfaces such as websites, games, iTV, mobile phones and more. There are two expected outcomes from this workshop. One is to define best practice, suggest answers to continuing areas of doubt and highlight unanswered questions about eyetracking in both its scientific and practical sense. The other is to explore how best to measure the satisfaction element of the ISO 9241 definition of usability through eye movement analysis especially in the genre of display cited above.

Please note interactive eyetracking such as eye typing is not within the focus of this workshop.

Participant Selection Criteria

This workshop is aimed at both practitioners and academics:

Practitioners who use eyetracking in their work for design and evaluation purposes

Academics who are involved in applying eyetracking research to the commercial domain.

We aim to select participants who have experience in using eyetracking or, if of little experience, who have developed a position or view on the use of eyetracking for commercial reasons. The workshop is not positioned as a tutorial and we do not wish to involve attendees who cannot actively participate in the discussions.

We hope 12-15 people will apply for the workshop making the number of anticipated attendees 18 including the three workshop leaders. We will make our selection based on getting a range of experience and attitudes to research in, or the commercial use of, eyetracking.

In a recent British HCI 2005 conference, the workshop attracted academics as well as practitioners. Academics that use eyetracking for design work, and who wish to appreciate the commercial parameters that may impact upon the implementation of their research ideas will be interested in attending. Eyetracking is also an excellent area where communication between academic and practitioner worlds needs to be encouraged to promote sharing of best practice and ideas.

The due date for position papers will be 15 December 2005. People will be notified of acceptance to workshop by 31 January 2006 in time for participants to sign up for early registration in early February.

Pre-Workshop Participant Activities

- Prior to the workshop interested parties will be asked to submit a position paper (2-4 pages) by email by 15 December 2005.
- Position papers from all accepted attendees will be posted on a workshop website prior the workshop.
- Attendees will be asked to read position papers from their fellow workshop attendees and prepare a 5 minute presentation on one of the position papers on the site of their choice (but not their own).
- They will be encouraged to review references and reports that are recommended or referenced by their fellow workshop attendees.
- Attendees will also be encouraged to participate in an online eyetracking discussion group both before and after the workshop.

Pre-Workshop Facilitation Activities

- Each workshop facilitator will create a personal position paper.
- Review and decide on attendees from the applicant position papers.
- Prepare a 5 minute summary of questions and issues arising from the accepted papers for presentation on the day.
- Prepare themes for the discussion groups based on submitted papers. Proposals for the break-out groups and questions for discussion during the workshop will be drafted as back up but it is hoped that delegates will maintain notes themselves during the presentations of key point/issues they would want to discuss in the themed discussion groups.

- Post break-out groups themes and questions prior to the workshop for attendee evaluation and feedback.
- Encourage participation in the online discussion group and exchange of reference materials prior workshop.

Workshop Session Timeline

Introduction

We believe one of the values of the workshop will be get people talking in-depth about the issues and problems they have about eyetracking. To this end discussion groups will take up a large part of the workshop time; presentations will be of limited duration. During the 5 minute initial presentation time allowed the other attendees will be asked to make notes, on 'post it' notes, of recurring points of interesting they think ought to be discussed further which they will then be asked to allocate to an appropriate theme(s) by posting the notes under the appropriate theme heading.

After discussions the breakout groups will be encouraged to present their conclusions in a prescribed format. This will facilitate the closing workshop discussion and the consolidation of the workshop outcomes by the workshop leaders prior to production of the workshop poster and future article(s).

Overview of workshop activities

Morning:

Introductions and summary presentations of position papers

Attendees choose which break-out groups to attend

Breakout session one, followed by reporting back to group and group discussion.

Afternoon:

Breakout two followed by reporting back to group and group discussion.

Breakout three followed by reporting back to group and group discussion.

Wrap-up of the day and next steps.

Conclusions from the workshop will be documented throughout the day. Post workshop the discussions and best practice guidelines agreed upon by the group will be documented and distributed by the facilitators principally as downloadable files via the internet.

Workshop Description And Activities

Time start	Time end	Duration (mins)	Topic or Event
8.30	8.35	5	Welcome to the workshop. Outline of the day, processes and goals for the workshop.
8.35	10.00	85	Attendees will briefly introduce themselves and their backgrounds to the group and deliver the 5 minute summary of the paper of their choice.
10.00	10.30	30	COFFEE BREAK
10.30	10.45	15	Themes of break-out groups and discussion on key questions to be covered in the breakout groups agreed. Attendees nominate themselves for breakout groups.
10.45	11.45	60	First themed breakout group discussions
11.45	12.00	15	Groups report back to whole workshop on breakout groups, presenting synopsis of their discussions from a flip chart.
12.00	13.00	60	LUNCH
13.00	14.00	60	Second themed breakout discussions
14.00	14.20	20	Groups report back to whole workshop on breakout groups, presenting synopsis of their discussions from a flip chart.
14.20	14.35	15	COFFEE BREAK
14.35	15.35	60	Third themed breakout discussions
15.35	15.55	20	Groups report back to whole workshop on breakout groups, presenting synopsis of their discussions from a flip chart.
15.55	16.30	35	Discussion as to which points on the breakout flip charts contribute to the goals of the workshop. Close

The Organisers' Backgrounds

Name (primary contact)	Tony Renshaw
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Tony Renshaw gained his PhD in Human Computer Interaction at Leeds Metropolitan University. His research topic entitled 'Designing for Visual Influence' featured the use of eye tracking to explore the nature of eye movements over various visual display designs. Tony's work has resulted in several peer reviewed publications at conferences such as CHI, INTERACT, HCI and in 'Interacting with Computers' (see below). He is now part of a team headed by Professor Janet Finlay, set up within the university, offering usability evaluations of web sites and software applications to a variety of customers large and small, work which builds on Tony's PhD research. Prior to that Tony had a career in the Computer Services division of International Computers Ltd. as a Finance Manager. Tony co-chaired a similar workshop, at the 19th British HCI conference in Edinburgh this year (2005), to the one proposed here. The one day workshop attracted participants from America, Australia, and several European countries.

Publications

Renshaw, J. A., Finlay, J.E., Ward, R.D., and Tyfa, D (2002) The Impact of Object Dimensions on Eye Gaze Human Computer Interaction 2002, 2, p86-89.

Renshaw, J. A., Finlay, J.E., Ward, R.D., and Tyfa, D (2003) Designing for Visual Influence: An Eye Tracking Study of the Usability of Graphical Management Information Human-Computer Interaction INTERACT '03, 1, 144-151.

Renshaw, J. A., Finlay, J.E., Ward, R.D., and Tyfa, D (2004a) Regressions Re-visited: a New Definition for the Visual Display Paradigm CHI 2005, Late Breaking Results, p1437-1440.

Renshaw, J. A., Finlay, J.E., Ward, R.D., and Tyfa, D (2004b) Understanding visual influence in graph design through temporal and spatial eye movement characteristics. Interacting with Computers, Vol 16, p557-578.

Renshaw, J. A., Finlay, J.E., Ward, R.D., and Tyfa, D (2005) A Back-track to Satisfaction, Human Computer Interaction 2005, 2, p73- 76.

Name	Natalie Webb
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Natalie has been a usability consultant in Amberlight for a period of 2 years after having completed an MSc in Human Computer Interaction at the University of London Interaction Centre. Natalie has conducted UCD assessment and design for clients of international standing as well as small high tech companies. She has also been involved in a number of eyetracking studies. Prior to working in HCI Natalie worked as a Management Consultant for Booz Allen Hamilton in Australia. Natalie ran a recent workshop at the 19th British HCI conference in Edinburgh this year (2005) in conjunction with Tony Renshaw (see details below) of Leeds Metropolitan University. The workshop was conducted along similar lines to those proposed here. The one day workshop attracted participants from America, Australia, and several European countries.

Name	Janet Finlay
Title	Professor of Interactive Systems
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Professor Janet Finlay is co-ordinator of the Interaction Design research activity within the Interactive Systems and Learning Environments Group at Leeds Metropolitan University. Her current research interests focus on patterns for interaction design, genre analysis and user experience, objective usability assessment methods and e-learning. Janet co-organised a Workshop at CHI'2003 with Sally Fincher, John Thomas, Sharon Greene, Paul Matchen, Laretta Jones and Pedro Molina on Perspectives on Patterns: Concepts and Tools.

Publications

Janet Finlay has co-authored several books amongst them Human-Computer Interaction now in its third edition and has published numerous articles and papers in HCI.

Call for Participation

This workshop will be highly interactive, with most of the time being allocated to discussion groups organised by themes determined by participants as being stimulating important and interesting. Eyetracking is now an almost standard offering from commercial HCI analysts. However, what are the best ways to exploit the strengths and minimise the weaknesses of this technique? This workshop aims to gather individuals who have an interest in using eyetracking for the evaluation and design of digital interfaces such as websites, games, iTV, mobile phones and more. There are two expected outcomes from this workshop.

- One is to define best practice, suggest answers to continuing areas of doubt and highlight unanswered questions about eyetracking in both its scientific and practical sense.
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This workshop is aimed at both practitioners and academics: Practitioners who use eyetracking in their work for design and evaluation purposes or those that have decided against doing so for good commercial reasons and Academics who are involved in applying eyetracking research to the commercial domain.

Interested individuals should submit a 2 to 4 page position paper using the CHI Publications Format [.doc](#) and send submissions to Tony Renshaw at t.renshaw@leedsmet.ac.uk by the 15 December 2005.

Please note interactive eyetracking such as eye typing is not within the focus of this workshop.

Cover Sheet and Technical Requirements

Contact:	Tony Renshaw
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