Searching for Fun: Casual-leisure Search

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ABSTRACT

People spend more and more time online, not just to find information, but with the goal of enjoying themselves and passing time. Research has begun to show that during casual-leisure search, peoples' intentions, their motivations, their criteria for success, and their querying behaviour all differ from typical web search, whilst potentially representing a significant portion of search queries. This workshop will investigate *searching for fun*, or casual-leisure search, and aims to understand this increasingly important type of searching, bring together relevant IR sub-communities (e.g. recommender systems, result diversity, multimedia retrieval) and related disciplines, discuss new and early research, and create a vision for future work in this area.

1. BACKGROUND & MOTIVATION

Using the Internet has become one of most popular leisure activities [6], with a report in 2006 stating that 'Some 30% of internet users go online on any given day for no particular reason, just for fun or to pass the time' [5]. Consequently, we can conclude that, beyond simply searching the web for results that relate to leisure-oriented information needs, such as hobbies and interests, many people are searching the web with no obvious goal and with different ideas about what counts as a successful searching session. These findings put a very different onus on the retrieval algorithms and overall search experience that services like Google, YouTube, Digg, and Amazon provide. Further, it puts a very different onus on how we evaluate successful search results and overall periods of casual-leisure searching.

There is much research that highlights everyday, casual, and pleasure-oriented search. Beitzel et al [2] note that shopping and entertainment queries are nearly three times more common than research and learning queries. Further, as technology becomes more pervasive, many mobile queries can be attributed to leisure and entertainment [1]. Research, however, by Savolainen has been studying the nature of 'Everyday Life Information Seeking', as opposed to work-oriented search tasks, since 1995 [7]. These studies, however, do not tell us much about *searching for fun*, but rather that people perform searches for information relating to leisure-oriented topics.

Some of our recent work has focused on the nature of searching for fun itself. Wilson and Elsweiler have been analysing the search sessions reported on Twitter by those 30% of people who go online simply to have fun and pass time [8]. Elsweiler et al summarized these sessions, and the findings from a study of information needs relating to television usage [3], into a model of casual-leisure information behaviour [4] that highlights four features of *searching for fun*:

1. Many search sessions are not initiated in response to a specific information need, but in response to a mood or physical state, a desire to be distracted from some aspect of life, or just in a response to having some free time.

2. These needs can be met without eventually finding specific information, despite finding lots of results.

3. Any *Information* needs in these sessions are optional and often transient.

4. If an *Information* need is present, actually resolving them is also optional.

These results mean that: success is not defined by finding information or resolving an information need; the journey and the experience are important; and that success can even be important for health reasons. If this is true then can current search engines be doing a good job? Do vertical search environments, like YouTube and Amazon, support these experiences well? Similarly, we must ask if metrics such as time, precision, and recall are really appropriate when people are using these services as the medium for simply spending *more* time enjoying themselves.

The idea of filtering or searching through information without an explicit query from the user is of course hardly new in itself. There is a large body of research on collaborative recommender systems that aim to suggest items such as movies, music or games that a given user may enjoy. Research into result diversity, rather than precision, may also play a key role in casual-leisure search. Further, the research into search personalization and topic models of interests are clearly related to individual search preferences. Finally, much online leisure time is spent on social networks, and so social content recommender algorithms are also a relevant area of IR research. While each of these approaches, however, can support different aspects of casual-leisure searching, they certainly do not go all the way to fulfilling the nebulous and often undirected need-less search sessions we have described. Consequently, we believe that ECIR is a key venue for hosting a workshop that will bring together these different IR sub-communities, as well as neighbouring disciplines such as mobile, digital libraries, and exploratory search.

There are lots of other open questions relating to *searching for fun*: What are people's querying patterns like in these situations? How can systems, models, and algorithms better support users in this behaviour? What are the best approaches or measures to evaluate solutions? These are important questions for the domain of information retrieval, and so ECIR is a key venue for gathering searchers from around the world to talk about *searching for fun*.

2. GOALS / OBJECTIVES

Using the ECIR as a grounding community, the objectives of the workshop are:

- Unite people from different parts of the IR and neighbouring communities.
- Clarify the differentiating aspects of casual-leisure search sessions.
- Identify the most important challenges to overcome.
- Discuss approaches and methodologies to tackle these challenges of understanding casual-leisure search.
- Explore models of formal, rigorous, and mathematical understanding of users' needs in these situations.
- Identify and develop future collaborations within the communities for investigating casual-leisure search.
- Set an agenda for future research and workshops.

3. TOPICS

The topics of the workshop will be evaluation focused and include but are not be limited to:

- Understanding information needs and search behaviour in casual-leisure situations.
- How existing systems are used in casual-leisure searching scenarios.
- Systems / Interfaces / Algorithmic approaches to supporting Search in Casual-leisure situations.
- Use of Recommender Systems for Entertaining Content (books, movies, videos, music, websites).
- Modelling of users interests and generation of accurate and appropriate user profiles.
- Interfaces for exploratory search for casual-leisure situations.
- Evaluation (methods, metrics) of Casual-leisure searching situations.

4. WORKSHOP SCHEDULE

The full-day workshop will be structured, as shown in Table 1, to encourage group discussion and active collaboration among attendees. Rather than focusing on polished work, we will also invite position statements with novel ideas. All of the accepted papers will be presented in a lightning round format, forming the basis for later discussion. The schedule may be adjusted to allow for one or two longer presentations that would significantly promote subsequent discussion. The remainder of the workshop will then be structured around discussion, and small break-out groups, followed by a working afternoon.

09:00 - 09:30	Workshop and attendee introductions
09:30 - 10:30	Lightning round paper presentations
10:30 - 10:45	*Break*
10:45 - 12:30	Discussion (breakout session followed by large group discussion)
12:30 - 13:30	*Lunch*
13:30 - 17:00	Completely interactive session. Informal coffee/break part the way through.
19:00 onwards	Workshop dinner

Table 1: Workshop Schedule

The afternoon has been left primarily for the purpose of achieving some of the workshop's goals. We want the session to explore opportunities, elicit and expand upon the important issues, identify and expand upon evaluation approaches, and facilitate and initiate future collaborations. Consequently, we envisage using the World-Café methodology with topics that evolve from the morning's discussions. All the organisers have coordinated and/or taken part in this methodology before. In lieu of the group identifying their own pressing issues, we will focus on the topics identified in Section 3 for beginning discussion. We also intend to use, if appropriate on the day, a collaboration-identifying speed-dating approach towards the end of the afternoon, to develop potential novel opportunities for future work.

5. SELECTION PROCESS

The workshop will call for short position papers (2-4 page ACM format). To establish the quality of papers, we have brought together a small group of researchers who are well established in the information retrieval, information seeking, recommender systems and HCI communities, and have actively published on a topic relating to that of the workshop. All submissions will be blind reviewed by three PC members. We expect to accept no more than 30 participants, with priority given to those who will be presenting an accepted submission.

Invited Programme Committee

- Pertti Vakkari, Tampere, Finland - Confirmed
- Elaine Toms, Sheffield, UK - Confirmed
- Ryen White, Microsoft Research, USA - Confirmed
- Leif Azzopardi, Glasgow, UK - Confirmed
- Bernd Ludwig, Goethe, Germany - Confirmed
- Ian Ruthven, Strathclyde, UK - Confirmed
- Daniel Tunkelang, LinkedIn, USA - Confirmed

We intend to publish the proceedings of the workshop using the CEUR Workshop Proceedings[1] publication service to make them accessible for the long term. The workshop organisers have used this publication route for workshop proceedings previously for other workshops[2].

6. RELATED WORKSHOPS

There have been several related workshops recently, although none with the specific remit proposed here. There have been several workshops in the USA, and a new counterpart started in Europe, focused on Exploratory Search and HCIR[3] (Human-Computer Information Retrieval) that have broached the topics of casual exploration. Also there was a workshop[4] called 'Entertain Me' at SIGIR2011, although this was focused more on handling vague, and thus interactive, topic-less queries. There have also been workshops on personal search[5], and of course many on PIM, that focus on search within peoples own information resources. The workshop proposed here, however, is novel in its focus on the use of IR systems in the increasingly significant amounts of casual-leisure time spent online.

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[1] http://www.ceur-ws.org
[2] e.g. http://CEUR-WS.org/Vol-763/
[3] http://hcir.info
[4] http://staff.science.uva.nl/~kamps/entertainme/
[5] http://www.cdvp.dcu.ie/iCLIPS/EPS2011/cfp.html

7. WORKSHOP ORGANIZERS

David Elsweiler is senior post-doctoral researcher and lecturer at the Department of Information Sciences at the University of Regensburg, Germany. He is a former Alexander von Humboldt Research Fellow. His work is focuses on topics such as information seeking, management and re-finding with the main aim of designing information access systems that align with the way people think and behave naturally. He has published a number of articles describing this work in leading IR conferences and journals, and is a prize-winner at SIGIR. He has also published articles on topic of casual-leisure search and recently co-authored, together with Max Wilson, a high-profile book chapter on this topic. David is an active member of the IR, information science and Personal Information Management (PIM) communities, regularly reviewing for top journals and conferences in these fields. His growing importance in the community was recently highlighted when he was invited to hold the keynote address at the Future Directions in Information Access Symposium held in conjunction with the European IR summer school (ESSIR). He has co-organised several workshops including being a member of the organisation committee of the PIM 2009 workshop at ASIST, and being co-chair the SIGIR 2010 workshop on Desktop Search, the Personal Knowledge Management (PKM) 2010 workshop. He holds BSc and PhD degrees from the University of Strathclyde, Scotland.

Max L. Wilson is a Lecturer in HCI and Information Seeking, in the Future Interaction Technology Lab at Swansea University, UK. His research focuses on Search User Interface design, taking a multidisciplinary perspective from both Human-Computer Interaction (the presentation and interaction) and Information Science (the information and seeking behaviours). His doctoral work, which won best JASIST article in 2009, focused on evaluating Search User Interfaces using models of Information Seeking. Max received his PhD from Southampton University, under the supervision of m.c. schraefel and Dame Wendy Hall, where much of his work was grounded in supporting Exploratory Search, and within the developing context of Web Science. Max mainly publishes in HCI and Information Science communities, including a monograph with co-authors schraefel, Kules, and Shneiderman on future Search User Interfaces for the Web, a lecture on Search User Interface Design for Morgan and Claypool, and a book chapter on Casual-Leisure Information Behaviour with David Elsweiler. Given the social evolution of the Web, and his interest in Web Science, some of Max's more recent work has focused on how people use social media, especially microblogging, as an information resource. Max is active in in several communities, running workshops (e.g. euroHCIR), panels with community leaders (e.g. repliCHI), and on conference committees (forthcoming Interface Track Chair for IIiX2012, Research Community Chair for CHI2013, and Social Media chair for ICWSM2012).

Morgan Harvey is a post-doctoral researcher at the Institute of Computer Science at the University of Erlangen-Nuremberg, Germany. His main body of research focuses on understanding the needs of users in various search and information seeking situations, particularly in the growing field of social media. His doctoral thesis introduced a family of new Bayesian latent variable models specifically designed for social media and tackled a number of key open problems in the fields of social tagging and recommender systems. He has a strong background in working with statistical models to better understand observed user behaviour and how these models can be exploited to improve search systems. He has published a number of papers drawn from his thesis work at leading Information Retrieval and Knowledge Management conferences including ECIR, WSDM and CIKM. More recently he has worked with David Elsweiler on understanding how people search and re-find in email clients. A paper derived from this work was awarded an honourable mention at SIGIR 2011 in Beijing. He holds BSc (honours) and Ph.D degrees from the University of Strathclyde, Scotland.

8. REFERENCES

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