

# Call for Papers

## Behaviour and Information Technology (BIT) Special Issue on

### Cognitive Modeling of Web Navigation

**Editors: Bipin Indurkha and Herre van Oostendorp**

---

**(Extended) Submission deadline: 1<sup>st</sup> October 2010**

---

#### Introduction

The aim of this special issue is contribute to improvement of existing cognitive models of web navigation like SNIF-ACT (Fu & Pirolli, 2007), CoLiDeS (Blackmon *et al.*, 2005; Kitajima *et al.*, 2005), CoLiDeS+ (Juvina & Van Oostendorp, 2008), etc. On the modeling aspect we want to focus on several topics:

- developing models that also incorporate information from pictures
- automation of the models, and
- applications enhancing web navigation and information search, such as designing support mechanisms

We also want to explore the wider context of web navigation. Traditionally information retrieval performance on the web is considered to be mainly determined by:

- characteristics of the task such as the complexity of the navigation task. Another aspect that can influence search performance is the way in which the requested information is represented; sometimes the information we search for needs to be gathered and combined from different places in the web or in a particular website.
- the organizational layout of the website, e.g. menu type or structure of information
- user-characteristics, in particular prior knowledge, spatial ability, or epistemological beliefs.

Moreover, after the navigation phase, the selected information itself needs to be evaluated on different criteria, and often this evaluation is a complex process.

Summarizing, the focus is on cognitive modeling, but we want also to explore what empirical data - concerning task, interface and user-characteristics - need to be taken into account for modeling. Work on web navigation and document use can provide requirements or constraints that are important for the cognitive modeling part. It can steer or direct *what* should be modeled, and in *what way*. Results in the fields of Cognitive Science or Human Factors are very relevant to the modeling, particularly if we can recognize some patterns in the empirical data and capture these insights into rules, and conditions under which the rules are applicable. Submissions in the area of navigation modeling are, thus, encouraged as well as submissions that empirically examine (task, user, interface) factors that are relevant for web navigation.

This special issue aims to present high-quality, high-impact, original research addressing cognitive modeling of web navigation. Articles must be based on original research. Complete articles should be submitted by the extended deadline of **1 October 2010**. Papers will be subject to the full review process of BIT.

### **Instructions for Authors.**

Manuscripts should not exceed 18 double-spaced pages. Papers should be prepared according to the BIT's guidelines for authors, and should be submitted online. Illustrations must be provided in separate .jpg or .gif files, and APA Publication Manual (not ACM or IEEE) style is used. The use of colour is discouraged. The guidelines for authors and online submission portal are available at <http://mc.manuscriptcentral.com/tbit>. If you are a first-time user of the journal's online submission portal, you will have to register yourself as an author on the system.

Potential authors should contact Meloney Bartlett from Taylor & Francis (meloney.bartlett@tandf.co.uk) or Bipin Indurkha (bipin@iiit.ac.in) or Herre van Oostendorp (herre@cs.uu.nl) with any questions about the special issue. For information on BIT see <http://www.tandf.co.uk/journals/tbit>.