

Guest Editors' introduction to the focussed issue on the 14th European Conference on Digital Libraries (ECDL 2010)

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In the 14 years since its first edition back in 1997 the European Conference on Research and Advanced Technology for Digital Libraries (ECDL) has become the reference meeting for an interdisciplinary community of researchers and practitioners whose activity centers around digital libraries. ECDL 2010, the 14th conference in this series, was held in Glasgow, UK, on September 6–10, 2010, following the editions in Pisa (1997), Heraklion (1998), Paris (1999), Lisbon (2000), Darmstadt (2001), Rome (2002), Trondheim (2003), Bath (2004), Vienna (2005), Alicante (2006), Budapest (2007), Aarhus (2008), and Corfu (2009).

Aside from being the 14th edition of ECDL, the 2010 edition was also the last. At least with this name, since, starting with 2011, ECDL has been renamed (so as to avoid acronym conflicts with the European Computer Driving License) to TPDL, standing for the Conference on Theory and Practice of Digital Libraries. As we write this editorial, we are looking forward for a successful “first” edition of TPDL, which is going to take place in Berlin in late September 2011.

This focussed issue brings together extended versions of six among the best papers of ECDL 2010. The authors of the 12 papers which had been considered the best by the ECDL

2010 Program Committee were invited to submit substantially extended and revised versions of their articles. The authors of ten of these papers accepted the invitation and submitted the extended and revised papers. Each of them was reviewed by three to four reviewers, each of whom assessed the overall quality of the submitted work and the degree to which it was indeed a substantial extension with respect to the original ECDL 2010 paper.

As a result, six articles were selected for inclusion in this focussed issue. These six papers range on a variety of topics, from information retrieval systems to encyclopedia alignment, video summarization, information retrieval evaluation, visual retrieval, scientific data, and still others.

The paper “Why did you pick that? Capturing reasons for assigning value in exploratory search”, by **Ulises Cerviño Beresi, Yunhyong Kim, Dawei Song, and Ian Ruthven**, examines which criteria (beyond topicality) are applied to judge the relevance of a document. Furthermore it tries to understand the complexity of the relevance judgement, i.e., *how many* criteria are actually applied. A visualization of the session is proposed to quickly detect emerging patterns. The results of this study shed light into the question why a relevance value was assigned to the document by the user, giving us valuable insights into the process that leads to relevance judgements.

The paper “A Hybrid System for German Encyclopedia Alignment”, by **Roman Kern, Christin Seifert, and Michael Granitzer**, analyzes the problem of “aligning” entries of different encyclopedias, with the aim of making their merging easier. Merging encyclopedias is a way to generate a more complete encyclopedia from several less complete ones, and has been adopted by publishers of “traditional” encyclopedias (i.e., ones *not* generated via crowdsourcing) as a strategy to stay in the market despite the growing popularity of collaboratively created ones. A hybrid

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approach that combines information retrieval techniques and a manual post-checking protocol is proposed and tested by the authors.

The paper “Effectiveness of geographic information retrieval—Topical, spatial, and temporal information retrieval system, Experiment framework design, Evaluation of improvement with a case study”, by **Damien Palacio, Guillaume Cabanac, Christian Sallaberry, and Gilles Hubert**, attacks the problem of performing information search when the query contains references to entities of a spatio-temporal nature. The authors develop an information retrieval system specially designed to handle this type of information, and test it on a data set and according to an experimental protocol that they have also specially designed to cater for this task. It should be noted that this is the extended version of the paper that won the Best Paper Award at ECDL 2010.

Dealing with scientific data poses a challenge that cannot be fully accommodated by contemporary digital library systems. In their paper “A Visual Digital Library Approach for Time-Oriented Scientific Primary Data”, **Jürgen Bernard, Jan Brase, Dieter Fellner, Oliver Koepler, Jörn Kohlhammer, Tobias Ruppert, Tobias Schreck, and Irina Sens** discuss a prototype of a digital library system that supports visual retrieval and exploration of a special kind of research data, i.e., time-oriented data. The system allows for the exploration of and search in the time-series data by specifying visual queries, for instance based on the query-by-sketch paradigm, and representing the results using different visualization techniques.

With the amount of video material available and consumed on-line for purposes beyond entertainment growing rapidly, means to summarize videos to provide fast clues to their content gain importance. The paper “Evaluation of Visual Video Summaries-User-Supplied Constructs and Descriptions”,

by **Stina Westman**, analyzes four different approaches to video summarization in a detailed user study. Four short documentaries from the Open Video Project were used as a basis to evaluate visual recognition and inference performance on an object and action level.

The paper “DiCoMo: A Method to Estimate Digitization Costs in Digital Libraries”, by **Alexjandro Bia, Rafael Muñoz, and Jaime Gómez**, takes a detailed look at the cost factors in digitization projects. Based on principles successfully deployed in software engineering to provide cost and complexity estimates for software development, a cost model is presented for large-scale digitization projects. It considers both environmental factors such as skills required or special quality aspects required, and allows specification both on the overall level as well as phase-specific estimates, from scanning to proof-reading and mark-up.

Many people have contributed to bringing this focussed issue to life. A special word of thank goes to the referees, whose job was instrumental in providing timely and high-quality feedback to the authors. It is thus a great pleasure to acknowledge the help of George Athanasopoulos, Stéphane Bressan, Leonardo Candela, Gobinda Chowdhury, Michael Christel, Pierre Cubaud, Sally Jo Cunningham, Gianpaolo Coro, Richard Furuta, Marcos Andre Goncalves, Stefan Gradmann, Preben Hansen, Bernhard Haslhofer, Min-Yen Kan, Viet Phan-Luong, Thomas Mandl, Zinaida Manzuch, Andras Micsik, Reagan Moore, Henning Müller, Liddy Nevile, Ragnar Nordlie, Vivien Petras, Viet Phan-Luong, Edie Rasmussen, Harald Reiterer, Felix Sasaki, Manfred Thaller, Ricardo Torres, Vassilis Tzouvaras, and Barbara M. Wildemuth. We are also grateful to Nabil Adam, Richard Furuta and Erich Neuhold for encouraging us to produce this focussed issue, which we hope represents an important contribution to research and practice in digital libraries.