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

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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 Encyclopediа 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
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, Evalua-
tion of improvement with a case study”, by Damien Pala-
cio, 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 informa-
tion 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 sys-
tems. In their paper “A Visual Digital Library Approach for
Time-Oriented Scientific Primary Data”, Jürgen Berna-
d, 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 con-
tent 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 doc-
umentaries 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 Digitiza-
tion Costs in Digital Libraries”, by Alejandro Bia, Rafael
Muñoz, and Jaime Gómez, takes a detailed look at the cost
factors in digitization projects. Based on principles success-
fully 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 spe-
cial 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.

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