# Knowledge and Data Engineering for e-Learning

Special Issue of IEEE Transactions on Knowledge and Data Engineering

Guest Editors: Qing Li, Rynson W.H. Lau, Dennis McLeod and Jiming Liu

## Aims:

With the advent of the Internet, we are seeing more sophisticated techniques being developed to support e-learning. The rapid development of Web-based learning and new concepts like virtual classrooms, virtual laboratories and virtual universities introduces many new issues to be addressed. On the technical side, we need to develop effective e-technologies for supporting distance education. On the learning and management side, we need to consider issues such as new style of learning and different system set-up requirements. Finally, the issue of standardization of e-learning systems should also be considered. In this special issue, our focus will be on the technical side, although other issues related to knowledge and data engineering for e-learning may also be considered.

# **Topics:**

In this special issue, we call for original papers describing novel knowledge and data engineering techniques that support e-learning. Preference will be given to papers that include an evaluation of users' experience in using the proposed methods. Areas of interests include, but are not limited to:

- Semantic Web technology for e-learning
- Data modeling (eg., XML) for efficient management of course materials
- Searching and indexing techniques to support effective course notes retrieval
- User-centric e-learning systems and user interaction management
- Profiling techniques to support grading and learning recommendation
- Data and knowledge base support for pervasive e-learning
- Course material analysis and understanding
- Automatic generation of guestions and answers
- Collaborative communities for e-learning

#### **Submission**

Prospective authors should prepare manuscripts according to the *Information for Authors* as published in recent issues of the journal or at www.computer.org/tkde/. Note that mandatory over-length page charges and color charges will apply. Manuscripts should be submitted through the online IEEE manuscript submission system at http://cs-ieee.manuscriptcentral.com/. Updated information of this call can be found at www.cs.cityu.edu.hk/~rynson/tkde/tkde-cfp.html.

#### Schedule

Submission deadline:
Completion of first round of reviews:
Minor/Major revision due (first round):
Completion of second round of reviews:
Minor revisions due (second round):
Final decision notification:

Publication materials due: Publication date:

July 1, 2007 October 1, 2007 November 1 / December 1, 2007 January 1, 2008 January 30, 2008 February 15, 2008 March 4, 2008 August 2008

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