Welcome to the third 2014 issue of the IEEE Transactions on Learning Technologies. While our journal is already in its seventh year of publication, it is still relatively new among educational technology journals. As a result, the editorial team receives many requests about the nature of the journal, acceptance rate, reviewing time, etc. To better communicate this information, we have recently updated the scope of the journal on its home pages. We have also added a statistics section with the most recent data about the journal. As you can see from this section, the journal acceptance rate for 2012 was 16 percent while the average time to the first decision for 2013 was 56 days. Note that the acceptance rate data is based on the final acceptance status after several possible rounds of revisions and so is lagging behind data related to the first submission cycle. We are also pleased to report that, according to the just-released 2013 Journal Citation Report from Thomson Reuters, TLT reached an impact factor of 1.22 and a five-year impact factor of 1.38. The editorial team will try to keep the scope and statistics data updated to help prospective authors make their decisions about submitting papers to TLT. However, we would also encourage the prospective authors to examine several past issues of the journal to get a better understanding of the scope and quality of the papers we publish. Note that you can do this even if you and your institution are not subscribing to TLT, since papers from previous years are available for free access online. On the other hand, if you are reading this introduction, you might also start examining our journal from this very issue since it provides a snapshot of most recent research in the field of Learning Technology.

This issue starts with a special section on Social Computing and Social Knowledge for e-Learning guest-edited by TLT Editorial Board members Timothy Shih and Julita Vassileva. Social learning technologies are becoming increasingly popular and we are pleased to feature this collection of five papers on different aspects of social learning in our journal. Please read more about these papers in the Guest Editors’ introduction to the special section included below.

The issue also includes three regular papers that provide an interesting contrast to the special section. The special section papers explore the same group of (social learning) technologies in the context of different subject domains. In contrast, the three regular papers focus on three very different technologies while examining them in the context of computing-related courses such as programming or computer graphics.

The first paper “Artificial Intelligence-Based Student Learning Evaluation: A Concept Map-Based Approach for Analyzing a Student’s Understanding of a Topic” by G. Pankaj Jain, Varadraj P. Gurupur, Jennifer L. Schroeder, and Eileen D. Faulkenberry from Texas A&M University at Commerce, advances research on assessing student knowledge using concept maps. While the idea of using student-constructed concept maps for understanding and assessing student knowledge of the subject is not new, the authors pioneer and explore a more powerful probabilistic approach to knowledge analysis. The paper presents an evaluation of the proposed approach in the context of two computer science courses.

The second paper, “Automatic Grading of 3D Computer Animation Laboratory Assignments” by Fabrizio Lamberti, Andrea Sanna, Gianluca Paravati, and Gilles Carlevaris, also focuses on automatic assessment, but of a different kind, concerned with problem-solving skills rather than conceptual knowledge. In general, assessment based on examining the product of student assignments is popular in computer science domain. However, the majority of work in this area is focused on program assessment where the correctness and quality of student programs can be assessed using tests and software metrics. The authors consider a more challenging case of assessing 3D animations in a computer graphics course. To address this challenge they suggest and evaluate a more powerful probabilistic approach to knowledge analysis. The paper presents an evaluation of the proposed approach in the context of two computer science courses.

The third regular paper in this issue explores gamification in the context of a C programming course. In their paper “Gamification for Engaging Computer Science Students in Learning Activities: A Case Study”, María-Blanca Ibáñez, Ángela Di-Serio, and Carlos Delgado-Kloos introduce a set of gamification approaches to peer learning where students learn by creating, evaluating, and answering multiple-choice questions. The explored gamification approaches include both traditional (leader board, badges) and less traditional (collecting phrases from leaders in computer science) approaches. A classroom study presented in the paper provides evidence of the impact of the explored gamification strategies on student engagement. It also indicates that different students are motivated in different ways and to different extent.

Enjoy your reading!