

CALL FOR PAPERS

Innovation in Technologies for Educational Computing

IEEE Transactions on Emerging Topics in Computing & Transactions on Learning Technologies Special Issue/Special Section October-December issues of 2017

IEEE Transactions on Emerging Topics in Computing and IEEE Transactions on Learning Technologies seek original manuscripts for a Special Issue/Section on **Innovation in Technologies for Educational Computing** tentatively scheduled to appear in the **October-December 2017 issues**. The goal of this joint special issue is to provide an overview of most recent emerging and “fringe” learning technologies. Sample topics of interest for this Special Issue/Section include:

1. **Virtual, augmented and mixed reality:** game-based learning, edutainment, gamification, intrinsic integration of game mechanics, virtual worlds and communities for education and training, digital humans and avatars in education, work-based and augmented learning
2. **Learning at Scale:** service-oriented architectures for learning, MOOCs, interoperability of learning systems, standards for knowledge sharing, open educational resources, linked open data, ontologies and reasoning
3. **Ubiquitous and wearable computing:** educational applications of sensor-based learning, smart watches and activity trackers, body sensor networks, ego-vision devices and life-logging equipment, Internet of Things, smart environments, context-aware services and tools
4. **Social computing:** educational data mining and filtering on social networks, social media for e-learning and e-assessment, social learning at scale, informal learning in social communities, peer review and assessment, trust and reputation in social communities
5. **Big Data and data analytics:** modeling of learners and learning processes, learning analytics, educational data mining, student profiling, behavioral and emotional analytics, learning data visualization, quantified self
6. **Intelligent systems:** adaptive learning, recommender systems, tools for smart tutoring and training, pedagogical agents and assistants, course and material personalization
7. **Learning in the making:** 3D printers and computer-controlled fabrication devices, open micro-controller, sensor and actuator technologies, smart programming environments, robotics
8. **Human-computer interaction:** natural and multi-modal interfaces, conversational agents, affective computing, interactive tabletops and surfaces, innovative interaction devices and techniques

This partial list is not exclusive and does not cover all novel learning technologies. As a part of the submission letter the authors are requested to argue why the technology presented in the submission should be counted as “emergent” and “cutting edge”. Submitted papers must describe original research which is not published nor currently under review by other journals or conferences. Authors are responsible for understanding and adhering to submission guidelines published on the IEEE Computer Society website (<http://www.computer.org>). Authors are invited to submit manuscripts focused on odd labeled topics directly to Transactions on Emerging Topics in Computing (TETC) at <https://mc.manuscriptcentral.com/tetc-cs> and papers focused on even labeled topics directly to Transactions on Learning Technologies (TLT) at <https://mc.manuscriptcentral.com/tlt-cs>. In special cases, authors are welcome to submit to the journal of their choice. Although with the above choice the authors are indicating which Transaction represents the primary target of their submission, they should be aware that papers may be published in TETC or TLT depending on the availability of space with the final allocation at the discretion of the Editor-in-Chief of the respective Transactions. Please address all other correspondence regarding this Special Issue/Section to InnoTechEduComp-SI@polito.it. Please note the following important dates:

- **Submission Deadline: December 1, 2016**
- **Reviews Completed: March 1, 2017**
- **Major Revisions Due (if Needed): April 1, 2017**
- **Reviews of Revisions Completed (if Needed): May 1, 2017**
- **Minor Revisions Due (if Needed): June 1, 2017**
- **Notification of Final Acceptance: July 1, 2017**
- **Publication Materials for Final Manuscripts Due: August 1, 2017**
- **Publication date: October-December Issues of 2017**

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