

CALL FOR PAPERS

Intelligence in Serious Games

IEEE Transactions on Computational Intelligence and AI in Games (T-CIAIG)

Special issue: Computational Intelligence in Serious Digital Games

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Serious Games can be a game-changer for many individuals, and even our society as whole. As an example, such centred on empowerment and inclusion can help individuals with special needs or parts of the population to gain skills in a playful and fun way that can make *the difference* in their every-day lives. Today's serious games increasingly demand for computational intelligence and perceptual skills to best grasp the player's attention, behaviour, engagement, and game-progress whilst modelling often complex and demanding game environments. This includes (computational) emotional and social intelligence to allow to understand the player on different levels, motivate her or him, and optimally adapt the pace of learning. In addition, owing to the rapid development in mobile and body-worn sensor technology, games can be taken more and more into the real lives of players.

Likewise, development of current and next-gen *intelligent* serious games demand not only for savoir-faire from the more traditional gaming perspective, but also increasingly for expertise in advanced machine learning, and in particular from the targeted gaming domain. The intention behind this special issue is to bring together late-breaking achievements, findings, and methods across according communities and disciplines around lending tomorrow's serious games enhanced intelligence for further benefit of their users.

Suggested topics include, but are by no means limited to:

- Big Data Usage in Serious Games
- Machine Intelligence and Deep Learning in Serious Games
- Cloud-based Serious Games
- Complex Systems approaches for Serious Games
- Mobile and Real-World Serious Gaming
- Social and Emotional Intelligence in Serious Games
- Intelligent Tutoring Approaches for Serious Games
- Player Attention and Behaviour Modelling
- Player-Adaptation and Motivation
- Intelligent Solutions for Security & Privacy Preservation
- Novel Intelligent Serious Games
- Intelligent Serious Games for Empowerment and Inclusion
- Intelligent Serious Games for Health and Well-being
- User Studies & Tests of Serious Games

Authors should follow normal T-CIAIG guidelines for their submissions, but identify their papers for this special issue during the submission process. Submissions should be 8 to 12 pages long. Short papers of 4 to 6 pages are also invited. Extended versions of previously published conference/workshop papers must be accompanied by a covering letter that explains the novel and significant contribution of the extended work. See <http://www.ieee-cis.org/pubs/tciaig/> for author information.

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