Serious Games using Immersive and Assistive Technologies (SGIAT)

Overview

Recent years have seen a rapid proliferation of serious games as they provide the context in which participants can dunk and experience a simulated environment as real, as they can achieve rich and complex content-based interaction. Serious games, including simulations, immersive environments and assistive technologies, have the potential to be an important tool that engages users in interactive and immersive activities that allow them to practice and improve technical, practical and creative skills. To achieve this, serious games use advanced multimodal interfaces to meet their objectives, but these alone will not guarantee that they succeed their intended purpose. To fully satisfy their potential, serious games must couple advanced technological interventions with sound theoretical principles into their design and structure, such as cognitive principles and theoretical frameworks.

This special session aims to explore how immersive and assistive technologies can be applied to improve the effectiveness in serious games in achieving formal or informal training. The special session calls for papers that explore the design and development of serious games, or simulation platforms that use/or may use immersive and assistive technologies. Papers are expected to demonstrate evaluation results of either a working prototype or preliminary testing of a working demo. Therefore, we invite practitioners and researchers alike to submit papers under the following topics.

List of Topics

• Serious games[1] in training and education
• Natural interfaces / Multimodal interaction in Virtual Reality
• AI in serious games for training/education
• Context aware (e.g., location, user performance, preferences, state of the game, other) serious games
• Cognitive and pedagogical principles / issues / aspects of serious games
• Empathy and serious games / educational games
• User centred serious game design
• Gamified education/training applications
• Advanced Interface (Virtual/Augmented Reality, pervasive) and applications for training.
• New interactive hardware for immersive support in game learning
• Principles, theories, and models
• Personalisation and customisation of virtual reality environments
• Immersive and assistive technologies for education, culture and healthcare

Author Info

Researchers are hereby invited to submit:

• a long paper (10 – 12 pages) detailing their research, or
• a short paper (6 – 8 pages) describing their work-in-progress.

Selected papers from the main conference and special tracks will be published in the Springer Proceedings, and the rest of the accepted papers will be published in the online proceedings with a confirmed ISBN number/reference.

Authors of the best papers will be invited to submit extended versions as a Special Issue of a prestigious Journal.
Please note that best papers considered for Springer publication must qualify as full paper not exceeding 14 pages.

**All papers** (including papers selected for Springer publication, Online Proceedings and poster submissions) must follow **Springer’s style guidelines**. More information available at: [https://immersivelrn.org/ilrn2017/author_info/](https://immersivelrn.org/ilrn2017/author_info/)

Each submission will be evaluated by a Programme Committee consisting of a panel of international experts. Each paper will receive two double-blind reviews.

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**Special Track Chairs**

- Markos Mentzelopoulos, University of Westminster, UK
- Daphne Economou, University of Westminster, UK
- Phil Trwoga, University of Westminster, UK

For questions regarding the special track contact us

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**Program Committee (to be confirmed/extended)**

[1] We refer to an ecosystem of platform and devices (desktop, mobile, iTV) that support serious games and also 2D or 3D environments.