

Special Session Call for Papers

Designing and Developing Mobile Serious Games for Augmenting Arts and STEM competencies, capabilities and skills (DG-STEAM)

Overview

Mobile Serious Games may enable students to actively explore and make sense of their learning environment by practicing artistic and rhythm-based dexterities in conjunction to more technical and scientific skills. This amalgamation of rhythm and motion with scientific skills may refine the way students apply learning by using different modalities within a learning context and, moreover, promote integration of learners with special educational needs. Fostering sensory integration and regulation as a source of in-game approaches for enhancing bodily synchrony and praxis and the ability to plan actions and engage meaningfully with the world is a process that may be achieved through active game-play, autonomous and personalised in-game feedback that encourage rhythm-based learning using multimodal in-game mechanics. This special session aims to explore the use of mobile serious games that aim to refine and rethink how learning, teaching, engagement and inclusion of learners with special educational needs may be improved through motion, rhythm, artistic endeavours and science. Multiple ways of designing in-game feedback (i.e. stealth assessment) for personalisation and autonomous deep learning is a key research theme of this special session. Authors are invited to submit their research contributions or practical experience reports. All papers will be peer-reviewed by at least two referees. The special session provides an opportunity to experience state-of-the-art research and development in a plethora of game-based topics that render both technical game aspects or more empirical research papers related to own work that present innovations in the field of mobile serious games research for learning, teaching and training.

Topics

- Mobile Serious Games for enhancing learning through arts, rhythm, dance and music
- AI for Mobile serious games (e.g. autonomous and personalized game-play and feedback)
- Mobile serious games for cognitive training and learning
- Mobile Pedagogical models / frameworks for serious games
- Mobile Mapping learning attributes to game mechanics
- Mobile serious games evaluation with non-conventional methods
- Massive open online mobile serious games
- Gamification processes in mobile serious games
- Mobile serious games application in different disciplines
- Context-aware mobile serious games
- Teachers' experiences and approaches of using mobile serious games
- Students' experiences and approaches of using mobiles serious games
- Conceptions of and approaches to mobile serious games design
- 2D / 3D renderings for mobiles serious games
- Scripting processes for mobile serious games
- Procedural content generation in mobile serious games
- Investigations into balancing fun and learning features for mobile serious games
- Augmented reality / mixed reality for mobile serious games

- Brain Computer Interfaces and mobile serious games
- Mobile serious Games for health / lifestyle applications
- Mobile serious games for energy / environmental preservation
- Mobile serious games narrative and interactive story telling
- STEAM and children with Special Educational Needs
- Establishing and sustaining Communities of Practices and Communities of Reflective Practice for promoting STEAM in schools
- Serious Games employing Music and Dance to promote social inclusion
- Employing mobile serious Games to promote creativity and entrepreneurship

Contribution Types

Proposals for participation in the Special Session can be submitted in the following formats:

- Full Paper (min. 10 max. 12 pages). These include mainly accomplished research results.
- Short Paper (min. 6 max. 8 pages). These are mostly composed of work in progress reports or fresh developments.

All submissions will be peer-reviewed by at least two reviewers. All accepted papers will be included in the conference proceedings, provided at least one author pays the registration fee. The conference proceedings will be published as IMCL2019 Proceedings in the Springer series "[Advances in Intelligent Systems and Computing](#)".

For further questions, please contact the track chair(s).

Important Dates

08 Jul 2019 Submission of complete papers for special sessions

29 Jul 2019 Notification of acceptance

06 Sep 2019 Camera-ready due & Author registration deadline

31 Oct 2019 Conference Opening

Submission

Please visit: <https://www.conftool.net/imcl-conference/> and submit your paper as in the special session "**Designing and Developing Mobile Serious Games for Augmenting Arts and STEM competencies, capabilities and skills (DG-STEAM)**"

Program Committee

Chair(s)

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