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Serious Games Development and Applications

Third International Conference, SGDA 2012 Bremen, Germany, September 26-29, 2012 Proceedings



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Preface

The Third International Conference on Serious Games Development and Applications (SGDA 2012) was organized as a satellite conference to IFIP-ICEC 2012 in Bremen. SGDA 2012 built on the successes of the First International Workshop on Serious Games Development and Application, held in Derby in 2010, and the Second International Conference on Serious Games Development and Applications, held in Lisbon in 2011. The aim of SGDA is to collect and disseminate knowledge on serious games technologies, design, and development; to provide practitioners and interdisciplinary communities with a peer-reviewed forum to discuss the state of the art in serious games research, their ideas and theories, and innovative applications of serious games; to explain cultural, social, and scientific phenomena by means of serious games; to concentrate on the interaction between theory and application; to share best practice and lessons learnt; to develop new methodologies in various application domains using games technologies; and to explore perspectives of future developments and innovative applications relevant to serious games and related areas.

The re-emergence of serious games as a branch of video games has introduced the concept of games designed for a serious purpose other than pure entertainment. To date, the major applications of serious games include engineering, education, health care, military applications, city planning, production, crisis response, and training. Serious games have primarily been used as tools that give players a novel way to interact with games in order to promote physical activities, to learn skills and knowledge, to support social-emotional development, to facilitate behavior transformation, to treat different types of psychological and physical disorders, etc. Many recent studies have identified the benefits of using video games for a variety of serious purposes. However, most serious games are still mostly focusing on the learning objective, and not so much on developing engaging and motivating user interfaces. In the world of entertainment games, there has been much more focus on the user experience. Therefore the organizational committee decided to co-locate SGDA with the 11th International Conference on Entertainment Computing conference, in order to foster the dialogue between the entertainment and serious games communities and support a bi-directional knowledge transfer.

The conference is supported by the GALA Network of Excellence for Serious Games; the TARGET (Transformative, Adaptive, Responsive and enGaging EnvironmenT) Project, which is a large-scale integrating project funded by the European Community under the FP7 (ICT-2007.4.3) and Digital Libraries & Technology-Enhanced Learning 2009–2011 (Grant Agreement N° 231717); BIBA-Bremen Institute for Production & Logistics; the University of Bremen; Glasgow School of Art; INESC-ID; the Technical University of Lisbon; and the

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University of Derby. The University of Bremen hosted the third annual conference (SGDA 2012) on 26–29 September 2012.

A total of 22 papers on different aspects of serious games design and use were presented at SGDA 2012. We hope that participants benefited from the discussions and presentations held at the conference.

July 2012

Minhua Ma Jannicke Baalsrud Hauge Manuel Fradinho Oliveira Heiko Duin

Organization

SGDA 2012 was hosted by Bremen Institute for Production & Logistics (BIBA), University of Bremen, in cooperation with the Digital Design Studio, Glasgow School of Art, UK; SINTEF Technology and Society, Norway; and the TARGET project, which is partially funded by the European Community under FP7.

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