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Preface

Games play an important role in everyone’s life. Humans play games for fun, entertainment and other intrinsic reasons. Thus, playing games is part of human culture. Despite negative side effects like addiction, emotional dysfunctions and psychophysical strain, this holds also for digital games. Some years ago, a new kind of digital games entered the stage combining entertainment and fun on the one hand and training, education, science etc. on the other hand: Serious Games. Since then, Serious Games have passed a history of continuous improvement and scientific substantiation. Numerous application fields have been addressed, for example, learning in academia and school, health education, emergency training, rehabilitation and health training, to name but a few. In the meantime, activities in development and research have exploded. For example, Google scholar research using the search item “Serious Games” evoked more than 18,000 hits.

In Darmstadt, Germany, the great potential of digital games and in particular Serious Games were addressed early by scientific work. As a symbol of these activities, the GameDays were established in 2005 as a “Science meets Business” workshop in the field of Serious Games, taking place on an annual basis in Darmstadt. The principle aim of this initiative is to bring together academia and industry and to discuss the current trends and practices, grand challenges, and potentials of Serious Games for different application domains.

Since 2010, the academic part has been emphasized resulting in a first International Conference on Serious Games for Sports and Health. In 2011, the GameDays spectrum of topics was broadened and the different facets, methods, concepts and effects of game-based learning and training have been covered as well. In 2012, the Third International Conference of the GameDays was organised in conjunction with the 7th international Edutainment conference. In 2013, due to a time-shift from September to April, no international conference took place, but a round table and research community workshop “Serious Games – Quo Vadis” among selected German and European game researchers was initiated.

This year, 2014, the 10th GameDays including the 4th International Conference on Serious Games takes place. Again, all scientific papers were reviewed by 4 reviewers on average; the overall acceptance rate is ~40% (compared to ~50% in 2012).

The topics of the papers are settled in the fields of (game-based) training, teaching and learning, authoring tools, mobile gaming, health and rehabilitation, and citizen science. The papers address a broad scope of issues, including mechanisms and effects of (Serious) Games, adaptation and personalization, local, mobile, and internet learning and education applications, game, reuse and evaluation, game settings, types of learners, problem solving etc.

Furthermore, workshops are offered addressing Serious Games mechanics, designing mobile games, and authoring tools (StoryTec). Practical demonstrations
of systems (e.g. tools or interactive installations) and applications (games, learning environments) – ranging from ideas and concepts (posters) to prototypes and commercially available products – are provided within the exhibition space of the conference and the Serious Games (Team) Challenge at the public day of the GameDays. Here, altogether more than 20 exhibits are expected.

The editors would like to thank all PC members for their tremendous work and all institutions, associations and companies for supporting and sponsoring the GameDays 2014 conference: Technische Universität Darmstadt (Multimedia Communications Lab – KOM, Institute for Sport Science, Graduate School Topology of Technology and Forum for interdisciplinary Research – FIF), Hessen-IT, German Association of Computer Science, German Chapter of the ACM, G.A.M.E. (German game developers association), BIU (German association for interactive entertainment industry), VDE/ITG Association for Electrical, Electronic & Information Technologies, Darmstadt Marketing, Software AG, HEAG, KTX Software Development, gamearea FRANKFURTRHEINMAIN, GALA Games and Learning Alliance Network of Excellence and Springer.

Of course, special thanks goes to Springer for publishing the proceedings of the GameDays and Edutainment conference in LNCS in 2012 as well as for the support of the present LNCS, to Hessen-IT for supporting the GameDays since its early days in 2005 and to the Forum for interdisciplinary research (FiF) for bundling and supporting the wide range of Serious Games research activities at the Technische Universität Darmstadt (TU Darmstadt). The FiF forum offers space for topics, problems and projects too broad to fit within the framework of a single discipline. It proved to be the perfect partner for expanding the various Serious Games research efforts and consolidating the network of Serious Games researchers at the TU Darmstadt. The disciplines involved in the FiF Serious Games Research Group range from computer science, bioinformatics, and civil engineering to mathematics, sports science, and psychology. Further information about the interdisciplinary research in Serious Games at TU Darmstadt is available at www.serious-games.tu-darmstadt.de.

Further information about the “International Conference on Serious Games – GameDays 2014” is available on the conference website: http://www.gamedays2014.de

April 2014

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