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Learning by Playing

Game-based Education System Design and Development

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Proceedings

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Preface

With the widespread interest in digital entertainment and the advances in the technologies of computer graphics, multimedia and virtual reality technologies, the new area of "Edutainment" has been accepted as a union of education and computer entertainment. Edutainment is recognized as an effective way of learning through a medium, such as a computer, software, games or AR/VR applications, that both educates and entertains.

The Edutainment conference series was established and followed as a special event for the new interests in e-learning and digital entertainment. The main purpose of Edutainment conferences is the discussion, presentation, and information exchange of scientific and technological developments in the new community. The Edutainment conference series is a very interesting opportunity for researchers, engineers, and graduate students who wish to communicate at these international annual events. The conference series includes plenary invited talks, workshops, tutorials, paper presentation tracks, and panel discussions. The Edutainment conference series was initiated in Hangzhou, China in 2006. Following the success of the first (Edutainment 2006 in Hangzhou, China), the second (Edutainment 2007 in Hong Kong, China), and the third events (Edutainment 2008 in Nanjing, China), Edutainment 2009 was held August 9–11, 2009 in Banff, Canada.

This year, we received 116 submissions from 25 different countries and regions including Austria, Canada, China, Denmark, Finland, France, Germany, Greece, Hong Kong, Italy, Japan, Korea, Malaysia, Mexico, The Netherlands, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Taiwan, Trinidad and Tobago, UK, and USA. A total of 56 papers were selected, after peer review, for this volume. Three related workshops were also held jointly: Enriching Users' Edutainment Through Embodied Video Interactive Games, Research on Educational Robots of Taiwan e-Learning and Digital Archives Program, and Research on Innovative Design of Learning Software and Content.

Topics of these papers fall into 11 different areas: Interactions in Games, Simulation and Animation, Digital Museums and Digital Heritage, Game Design and Development, Social and Cultural Issues, Storytelling and Narrative in Education, Game-Based Learning/Training, VR-Based Education/Training, Vision and Imaging Technology in Games, Educational Robots, and Toys, and Augmented Reality in Education/Training.

We are grateful to the Program Committee for their great efforts and hard work in getting all the papers reviewed in a short period of time. We are grateful to the Organizing Committee for their support of this event. We would also like to thank the authors and participants for their enthusiasm and contribution to the success of this conference.

The success of Edutainment 2009 was also due to the financial and practical support of various institutions, including:

- Athabasca University
- iCore
- NAIT

We would like to thank all of them for offering the opportunity to organize Edutainment 2009 in a way that provided a diversified scientific and social program. Especially, we would like to thank all members of the Program Committee and Organizing Committee for their great job in defining the conference topics, reviewing the large number of submitted papers, and managing to put all the material together for this great event.

May 2009

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