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# Advances in Computer Entertainment

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# Preface

These are the proceedings of the 9th International Conference on Advances in Computer Entertainment (ACE 2012). ACE has become the leading scientific forum for dissemination of cutting-edge research results in the area of entertainment computing. Interactive entertainment is one of the most vibrant areas of interest in modern society and is amongst the fastest growing industries in the world. ACE 2012 brought together leading researchers and practitioners from academia and industry to present their innovative work and discuss all aspects and challenges of interactive entertainment technology, in an exciting, cultural, and stimulating environment.

ACE is by nature a multidisciplinary conference, therefore attracting people from across a wide spectrum of interests and disciplines including computer science, design, arts, sociology, anthropology, psychology, and marketing. The main goal of ACE is to stimulate discussion in the development of new and compelling entertainment computing and interactive art concepts and applications. At ACE conferences participants are encouraged to present work they believe will shape the future, going beyond the established paradigms, and focusing on all areas related to interactive entertainment.

This was the 9th ACE conference, and the first time that such an entertainment computing conference was held in the emerging world. The theme of ACE 2012 was “Entertaining the Whole World,” and Kathmandu in Nepal (“The Roof of the World,”) was chosen as the venue. In line with the theme, ACE 2012 emphasized the use of easily available technology. Technology for entertainment design is becoming cheap or even extremely cheap. Designing interactive entertainment with commercial off-the-shelf technology (cheap sensors, Kinect, Arduino, etc.) is becoming regular business. How can we use this development to invent yet more new ways of harnessing the entertainment power of creating? Can we convert consumers of entertainment into creators of entertainment, where the process of creating is perhaps as important as the resulting product? Young people in emerging markets can become creators as well as consumers of digital entertainment. They can distribute their work through apps and the Internet, and through media creativity benefit their country and economy. We wish to strike up discussions and initiate projects that will benefit the emerging world through digital entertainment.

In order to emphasize the theme of the conference some special tracks and events were organized. One of them was the Art and Culture track, with papers, games and other forms of entertainment, and interactive works of art showcasing the diversity of art and culture found in today’s digital artifacts. This diversity can also be found in the tracks on Creative Showcases and Demonstrations and the Poster and Late-Breaking Results tracks. All the presentations from the regular sessions and those of these tracks can be found in these

proceedings. We received about 140 submissions in the various categories (papers, posters, demonstrations, workshops, panels). From the regular paper submissions, ten papers were accepted for long presentations (about 14%), and 20 for short presentations (about 27%). Many poster papers and papers accompanying demonstrations could be accepted. There are agreements with some journals to have special issues devoted to some subthemes of ACE 2012 and containing a selection of the best papers from ACE 2012.

ACE 2012 had several satellite workshops. There were regular workshops on entertainment research and technology, but new for ACE and particularly important for the theme of the conference were the Entertainment Kids Workshops. The underlying idea of these workshops is that entertainment can empower children and young people in developing countries and communities with creative thinking and new media technologies. We hope to nurture and inspire young children to create new value propositions that will benefit their individual selves, communities, and countries. We want to view young children in developing countries as creative innovators and ambassadors of new technologies, rather than passive end-user consumers. And this last point in particular was addressed successfully in many of the proposals for Kids Entertainment Workshops that the organizers received. Several of these workshops could be organized, aiming at children aged between 4 and 12 as participants. Among the issues that were explored individually or in small groups we can find participatory design, using gaming platforms for body movement design, tangible interfaces and storytelling.

During plenary sessions of the conference two panels were organized. One panel was devoted to the results of the Kids Entertainment Workshops. The other panel was titled: Where Buddhism Encounters Entertainment Computing.

At ACE 2012, as in all previous ACE conferences, prizes were awarded for the best papers and best demonstrations. The top three in each category were awarded Gold, Silver, and Bronze prizes. For the first time, in 2012, there was a special “Diamond Best Award” for the best academic work in any category. This was co-awarded together with Springer, with a book prize sponsored by Springer.

ACE attendees brought books for donation in the fields of digital media, computer science, electronics, and related areas. These books were presented to a high school in Nepal during ACE. It is hoped that this will be a positive push that will allow some smart Nepalese kids to have a jump start in creativity. Although it is a small contribution to Nepal, we hope it will inspire a few young people to become creative media designers or interest them to become computer scientists or engineers, and perhaps start a new game or Internet service. We hope to create a “geek” culture.

ACE 2012 was organized in Kathmandu, Nepal. We think that there is a perfect match between the theme of the conference (“Entertaining the Whole World”) and the location (“The Roof of the World”) with its political and economic problems. Nepal is a developing country. It is a rich country when you look at people, nature, and ambitions. It is a poor country when you look at characteristics that play a role in comparisons between countries when measuring the economic situation and

economic developments. Obviously, ACE 2012 does not pretend to make immediate changes. But maybe the participants of ACE 2012 will learn from the theme, how it relates to a local situation, and how advanced research and advanced technology can be adapted to the affordable design and implementation of interesting entertainment applications. And, obviously, we hope the people that attended and experienced demonstrations learned that advanced research and technology can be used in creative and not necessarily expensive ways.

Part of the conference was organized in a Kathmandu hotel that hopefully, when necessary, will have utilities for generating its own electricity. For part of the conference there was no guarantee that electricity would be available owing to electricity rationing and power interruptions. Participants were asked to be prepared for situations in which they would have to present their paper, their poster, and their demonstration without having the guarantee that electricity is available. Workshop proposers and participants, including the Kids Entertainment Workshops, were asked to prepare their workshops and presentations in such a way that they could be successful without having access to electricity or when being forced to shift their activities to non-scheduled periods. We think that the creativity needed to deal with such situations is also helpful to designing and applying advanced entertainment technology in developing countries.

As can be expected, the organization of ACE 2012 was a team effort and a large number of people worked very hard to organize ACE 2012. A list of committees and committee members appears on the next pages. These committees were successful, because a record number of potential contributions were submitted and reviewed. However, particular thanks should go to Adrian Cheok who, together with our Nepalese research colleagues, took the daring initiative to have ACE 2012 in Nepal. And particular thanks should also go to the local organizers in Kathmandu for their pioneering efforts to make ACE 2012 a success, not only for the visitors from abroad, but also for the Nepalese community, from children to students, researchers, and policy makers interested in new and advanced technology and its use in creative applications that can bring joy.

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