Collaboration and Gaming

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In 1978, the philosopher Bernard Suits wrote of a future in his now classic Platonic book *The Grasshopper: Games, Life and Utopia*, in which the only human activity is game-playing and where the human race has developed what he calls the lusory effect, a psychological attitude required of a game player entering into the play of a game. In complete contrast to the perception on working life and Wittgenstein, Suits argues that game playing is a voluntary attempt to overcome unnecessary obstacles and that playing games is a central part of the ideal of human existence; thus games belong at the heart of any vision of Utopia. By the time of his death in early 2007, Suits should have been able to witness proof of a Darwinian evolution of the gaming utopia he foresaw thirty years before in the social fabric of modern life which is driven by social connectivity, shared experiences and collaboration, whether in real or virtual worlds. Be it political games, military games, business games, or recreational games, the boundaries between what is real and what is virtual are fused. All but clues to our future, Suits argues, concluding that cultivation is our salvation.

Cultivation of collaboration and gaming has spread at a phenomenal rate since Suits outlined his original vision. Digital collaboration has grown from merely supporting cooperative work activities and relationships through to connectivity and creative social media networks and virtual communities. Digital games have grown into a multi-billion dollar industry that are now played on a broad range of devices, including desktop and tablet PCs, dedicated consoles, and mobile phones. Social connectivity, regardless in which type of virtual environment, allows people to share ubiquitous experiences anywhere, at any time, on any device and over any network, often adapted to their individual needs and desires.

This special issue comprise six papers that celebrate mobile and ubiquitous collaboration and gaming. In the first paper, Agius, Angelides and Zad use collaboration for multimedia resources tagging. The authors experiment with a variety of tools such as Flickr, YouTube, del.icio.us and COSMOSIS, an MPEG-7 tool, and consider the correlation between user behaviour and collaborative multimedia tagging. In the second paper, Montoliu, Blom and

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Gatica-Perez explore collaboration on location information by tracking mobile phone usage. The authors experiment with mapping individual places of interest that could serve as recommendations from one mobile phone user to another. In the third paper, Huber and Ding exploit collaboration for web browsing. The authors develop techniques for web page partitioning, adaptation and delivery to multiple collaborating users.

In the fourth paper, Hurst and van Wezel augment games and gesture-based recognition into mobile phone interfaces. The authors experiment with finger tracking in an augmented reality board game on mobile phones and demonstrate that it sustains an increased level of engagement and entertainment. In the fifth paper, Yamabe and Nakazima augment gaming into training. The authors experiment with four augmented reality environments — Augmented Reality GO, EmoPoker, Augmented Calligraphy and AR Drum Kit — in their efforts to achieve the right user design for such a training environment. In the last of the papers, Angelides and Sofokleous use gaming for the allocation of shared resources. The authors experiment with MPEG-7 and MPEG-21 and achieve a Nash equilibrium while serving the needs of each user.

Marios C. Angelides is Professor of Computing in the School of Engineering and Design at Brunel University, a Chartered Fellow of the British Computer Society and a Chartered Engineer. He holds a BSc and a PhD both from the London School of Economics where he has begun his academic career as a Lecturer in Information Systems more than 20 years ago. He has been researching semantic media and personalisation, including gaming, for over two decades and the application of MPEG standards through evolutionary computing for another decade. His research work on gaming began in the early 1990s with the application of evolutionary computing in gaming simulation. In the last five years, he has been researching personalisation of online games through the application of MPEG-7 and MPEG-21. The EPSRC has funded his research work through several projects. Results from all projects have been published extensively in relevant journals. In the last 5 years, he guest-edited over a dozen special journal issues on semantic media. In 2011, Wiley published his edited book on MPEG applications whose main focus is semantic media. He sits on the editorial board of *Multimedia Tools and Applications*.

Harry Agius is a Senior Lecturer in Computing in the School of Engineering and Design at Brunel University. He is a Fellow of the British Computer Society and holds a BSc in Computing and Information Systems, an MSc in Analysis, Design and Management of Information Systems, and a PhD in Multimedia Systems, all from the London School of Economics (LSE). Harry has spent his entire academic career undertaking research into various aspects of multimedia content management, including multimedia content modelling schemes and standards, especially MPEG-7, personalised user access and navigation interfaces for video content, video summarisation techniques that exploit user physiological responses for personalisation, and personalisation of massively multiplayer online games (MMOGs). His research has been funded by the EPSRC and published in a wide range of journals, books, conferences and workshops. In 2011, Wiley published his edited book on MPEG applications whose main focus is semantic media. Harry serves on the editorial board of the *Multimedia Tools and Applications* journal and each year serves on the international programme committees for various multimedia conferences worldwide.