

# Hyperrealistic Intelligent Environments 2014 (HyperRealitIE '14)

*Shanghai, China. 30<sup>th</sup> June 2014*



The first workshop on Hyperrealistic Intelligent Environments 2014 (HyperRealitIE'14) focuses on innovation ideas for future '*Next Generation*' Intelligent Environments, where virtual applications and data will allow users to further integrate themselves within augmented physical spaces. By exploring this area we aim to encourage further research and advances in Intelligent Environments, combining Technology and Virtuality with Architecture and real spaces; bringing together researchers and industry. Hyperreality tries to achieve a vision in which virtuality and reality are seamlessly blended together as if they were one, with no distinction on where one ends and the other begins; blending physical reality with virtual reality and human intelligence with artificial intelligence in a holistic way<sup>1</sup>.

Technologies such as virtual reality and augmented reality are used every day as standalone applications in areas such as computer gaming and mobile devices. Companies such as Facebook, Google, Nokia and Microsoft are investing and developing technology and interfaces to connect virtual and real worlds. This creates huge opportunities for integration and research with intelligent environments. We believe this workshop is providing a timely opportunity to discuss the opportunities for research in this strategically important area, as showed by the 3 peer-reviewed papers presented.

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<sup>1</sup> "Hyperreality : Paradigm for the third millennium". Tiffin, John; Nobuyoshi Terashima (2005)

In the first presentation Rania HODHOD, Hillary FLEENOR and Syedali NABI introduce an educational platform prototype for young children that combines Augmented Reality (AR), pedagogical agents and Intelligent Tutoring Systems (ITS) with elements of serious games that are not present in ITS. The second paper by Ahmed ALZHRANI, Vic CALLAGHAN and Michael GARDNER describe a work-in-progress research that uses Mixed Reality (MR) in education, allowing local students to interact with remote students as if they were physically together. Our final presentation by Pier Alessio RIZZARDI and Hankun ZHANG delves into the current situation of Chinese architecture and compares it with contemporary European architecture, explaining the forces that drive modern urban Chinese architecture forward.

We organised the presentations at Shanghai in combination with the Cloud of Things 2014 (CoT'14) workshop under a collective banner of HyperCities'14, as we felt smart-cities were a natural framework for the cloud-of-things technologies; we trust you will agree with us.

Finally, we would like to thank the workshop participants and most importantly, the authors for sharing their work, since they are the cornerstone of this workshop.

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For more information on next events visit [www.hyperrealitie.com](http://www.hyperrealitie.com)

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Rania HODHOD, Hillary FLEENOR and Syedali NABI (Columbus State  
University, USA)
2. *Towards the Physical Instantiation of Virtual People and Components in  
Physical Mixed-Reality Tele-Presence Environments;* Ahmed ALZHRANI,  
Vic CALLAGHAN and Michael GARDNER (University of Essex, UK)
3. *The condition of Chinese architecture. Elaboration of a critical approach;*  
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