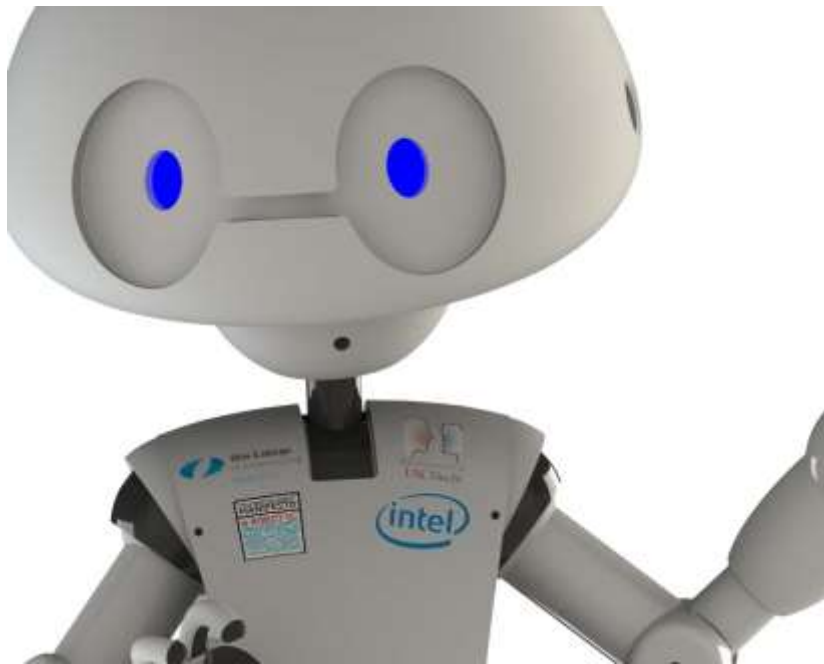


## Creative Science 2014 (CS'14)

*Shanghai, China. 30th of June 2014*



*Jimmy (from the '21<sup>st</sup> Century Robot' maker project)*

Creative Science 2014 (CS'14) is the fourth workshop in a series that started in 2010 which explores the use of science-fiction to motivate and direct research innovation. Creative Science employs art and literature to create prototypes of possible futures. These prototypes can target science and engineering products, new business models or even socio-political systems. However, in this workshop we will be exploring the use of science-fiction narratives to generate, describe and communicate visions for product innovation. The workshop is organised in two parts; the first consists of presentations of 4 peer-reviewed SFPs (SF-Prototyping 2014); the second, a hands-on workshop, is designed to guide attendees through process of writing SFPs (Imagine 2014).

The first of the presentations is from Tiina KYMÄLÄINEN (a creative science regular!), Farrukh SAHAR and Jarmo PALVIAINEN who present a SFP in storyboard style. In their story (*White Knights of the Smart City*), they describe a type of crowd sourced support-system for inhabitants of smart cities to help each other. This paper is useful at two levels, first the storyboarding approach illustrates a most valuable toolkit for SFP and secondly, the product at the heart of this story seems genuinely useful.

The second presentation from Jan ZYBURA (*Science Fiction Prototyping as a Tool to Turn Patents into Innovative Marketable Products*) is an intriguing article that proposes the use of SFP to spot new capitalization opportunities for patents by employing SFP to act as a strategic creative thinking tool for reasoning about future market opportunities. Peng Liu and Shumei Zhang present an essay (*Some thoughts about the future of intelligent buildings and smart transportation*) that was written as part of a course in Shijiazhuang University, China that experimented with the use of SFP as a means to teach university students 'Computer English' in a motivating and relevant way. The final paper by Vic Callaghan introduces micro-SFPs and illustrates their use based on commentary relating to the technological singularity.

Finally, we wish to express our thanks to our sponsors, Intel and the Creative Science Foundation. Of course, most importantly, we want to thank the workshop participants and especially the authors as, without their support, there would be no workshop. If SFP inspires you, why not join us at our next Creative Science event (see creative-science.org for details).

Vic Callaghan – *Essex University, UK (vic@essex.ac.uk)*  
Brian David Johnson – *Intel Corp, USA (brian.david.johnson@intel.com)*  
Simon Egerton – *Monash University, Malaysia (simon.egerton@monash.edu.my)*  
Hsuan-Yi Wu – *National Taiwan University, Taiwan (d00741004@ntu.edu.tw)*  
Anasol Pena-Rios - *Essex University, UK (acpena@essex.ac.uk)*  
Shumei Zhang - *Shijiazhuang University, China (smzhang.sz@gmail.com)*  
Ping Zheng *Canterbury Christchurch University, UK (ping.zheng@canterbury.ac.uk)*  
Gary Graham – *Leeds University Business School, UK (G.Graham@lubs.leeds.ac.uk)*  
Anita Greenhill *Manchester Business School, UK (A.Greenhill@mbs.ac.uk)*  
Jennifer O'Connor - *National University of Ireland, Galway (jgvtoc@hotmail.com)*  
Jeannette Chin – *Anglia Ruskin University, UK (jeannette.chin@anglia.ac.uk)*  
Minjuan Wang – *San Diego State University, UK (mwang@mail.sdsu.edu)*

20th May 2014



## **Table of Contents**

### **Invited Talks**

1. Brian David Johnson (Futurist & Principal Engineer at Intel Corporation, USA)
2. Hsuan-Yi Wu (National Taiwan University)

### **Regular Papers**

3. *White Knights of the Smart City Interaction Space*, Tiina KYMÄLÄINEN, Farrukh SAHAR, Jarmo PALVIAINEN (*Tampere University of Technology, Finland*)
4. *Science Fiction Prototyping as a Tool to Turn Patents into Innovative Marketable Products*, Jan ZYBURA (University of Mannheim, Germany)
5. *Some thoughts about the future of intelligent buildings and smart transportation*, Peng Liu and Shumei Zhang (Shijiazhuang University, China)
6. *Micro-Futures*, Vic Callaghan (University of Essex, UK)