# **Creative Science 2010 (CS'10)**

## Kuala Lumpur, Malaysia. 19th of July 2010

Creative Science 2010 (CS'10) is the first in a series of workshops that is exploring the use of science fiction to motivate and direct research into new technologies and consumer products. In particular, CS'10 applies a methodology we call *Science-Fiction Prototyping* (SF Prototyping) which employs stories to serve as prototypes to explore a wide variety of futures. In these proceedings we present two invited contributions from Brian David Johnson who coined the term *SF Prototyping* and defined the methodology. In the first contribution, *SF Prototyping*, Brian describes the history of SF Prototyping and introduces the methodology. His second contribution is a SF Prototype called '*Brain Machines*', that illustrates the principles involved.

The workshop proceedings then present a number of SF Prototypes drawn from the "Intelligent Environments" research community. Interestingly, in this first edition of the workshop many of these stories fall into what might be classed as explorations of mixed reality technology. In "Tales from a Pod" virtual reality is applied to the provision intelligent personalised teaching environments whereas in the second, "Mdi" a story of an extraordinary portable gadget that produces holograms and can recognise gestures is described. In the third story "We All Wear Dark Glasses Now" a rather darker application of augmented reality is presented, where the high-tech glasses mislead the wearer that his world is much nicer that it really is. The forth story, "Voices From The Interface", is a voyage to an imaginative world where brain computer interfaces become almost indistinguishable from paranormal phenomena. Paranormal phenomena sometimes features in folklore and the fifth story, "Were-*Tigers of Belum*", elegantly mixes a mystical tale with the latest high-tech sensory networks to provide an engaging story that bridges the past and present. The sixth paper, "Knowing Yourself' explores the more spiritual aspects of people by taking an "out of the box" journey into the metaphysical, in which physical objects, events, words, sounds or thoughts can be seen as a bundles of energy, a view which could have significant consequences for medical technology. Finally, the seventh paper, takes us full circle and back to the reality of ourselves by examining some of our most basic understanding of being human, consciousness and freewill, though the eyes of a discussion on the design of future reception robots. We hope you will agree, that this first workshop on Creative Science has produced some stimulating ideas that have the potential to challenge and push science. If you have enjoyed reading this first set of science fiction prototypes, why not write one yourself and join us at our next Creative Science event (see creative-science.org for details).

Brian David Johnson – Intel Corp (brian.david.johnson@intel.com) Simon Egerton – Monash University (simon.egerton@infotech.monash.edu.my) Vic Callaghan – Essex Universty (vic@essex.ac.uk)

### **Table of Contents**

#### Keynotes

- 1. *Exploring Science Fiction Prototypes in Persuasive TeleHealth*, Sumi Helal, University of Florida, USA
- 2. *Make It So: Learning From SciFi Interfaces*, Nathan Shedroff, California College of the Arts, USA

#### **Invited Papers**

- 3. SF Prototyping, Brian Johnson, Intel, USA
- 4. Brain Machines, Brian Johnson, Intel, USA

#### **Regular Papers**

- 5. Tales From a Pod, Vic Callaghan, Essex University, UK
- 6. *MDI*, Angelica Reyes, Universitat Politècnica de Catalunya, Spain; Ruth Contreras, University of Vic, Mexico
- 7. *We All Wear Dark Glasses Now*, Graham Clarke, University of Essex, UK; Malcolm Lear, University of Essex, UK
- 8. Voices From the Interface, Paul McCullagh, University of Ulster, UK
- 9. Automated Eye on Nature (AEON) and the Were-Tigers of Belum, Kar Seng Loke, Monash University (Sunway Campus), Malaysia; Simon Egerton, Monash University, Malaysia
- 10. Knowing Yourself, Yevgeniya Kovalchuk, University of Essex, UK
- 11. A Survey In Consciousness In Robots And Future Of Reception Robots, Hossein Farid Ghassem Nia, University of Essex, UK