



## 1st International Workshop

"Creative Science - Science Fiction Prototyping for Research" (CS'10)  
Kuala Lumpur – Malaysia, 19th of July 2010

**Background and Goals:** This workshop will explore the use of science fiction as a means to motivate and direct research into new technologies and consumer products. It does this by creating science fiction stories grounded in current science and engineering research that are written for the explicit purpose of acting as prototypes for people to explore a wide variety of futures. These "prototypes" can be created by scientists and engineers to stretch their work or by, for example, writers, school children and members of the public to influence the work of researchers. The outcomes of these interactions are then fed back to shape the science research and outputs. In this way science fiction prototypes act as a way of involving the widest section of the population in determining the science research agenda, thereby making science investment, and science output more useful to everyone ranging from companies, through scientists and engineers to the public, consumers and the government that indirectly fund R&D. In this way fictional prototypes provide a powerful interdisciplinary tool to enhance the traditional practices of research, design and market research. The goals of the workshop are to act as a catalyst of this new approach by acting as a forum where researchers from differing disciplines (notably science fact and science fiction) can come together to explore how to develop this area.

**Participation:** You are cordially invited to participate to the workshop either as a presenter or as someone simply wishing to learn more about this topic and, perhaps, join the discussion as a member of the audience. Participation is possible either by attending the workshop in person, or by participating via the Internet. For presenters (science researchers or writers) we are looking for short imaginative fictional stories (prototypes) of no more than 10 pages (and presentations of 15 minutes) based on recent scientific publications, which would act as motivation (or discussion) or how science research might be directed. Your submission should include a short discussion (no more than 2 pages) of how the story relates to your published work and vision for advancing scientific research. All fictional stories (prototypes) accepted will be published as part of the IE10 workshop proceedings. IOS Press will publish the proceedings and the format of the papers should follow the [IOS publication guidelines](#) and be submitted via the [workshop management system](#).

**Workshop Structure:** The workshop will comprise a single day event and will include:

- Presentations (papers) from science and engineering researchers on their own scientific papers/projects depicting how they foresee their research might impact future worlds.
- Presentations from science fiction writers depicting aspects of their stories that they feel would be feasible and useful for scientists to try to implement.
- A panel led discussion, with the audience, aimed at a) refining the fictional prototype methodology and b) exploring how this emerging area might be taken forward.

**The Venue:** CS'10 will run in conjunction with IE'10 at Monash University Sunway Campus which is situated on the outskirts of Kuala Lumpur, the exciting capital city of Malaysia. Kuala Lumpur is a multi-cultural society comprising a mix of Malay, Indian, Chinese and Europeans which come together to make one of the most vibrant and exciting cities in the world; a fitting place to meet and inspire discussions on the future. More details are given on the [IE10 web pages](#).



Co-located with the 6th International Conference on Intelligent Environments

### Sponsors:



Intel Corporation



Creative Science Foundation

### Important dates:

- Paper submission: 31st May 2010 (via the [CS'10 paper story submission system](#))
- Notification of acceptance: 17th June 2010
- Paper final submission (with revisions): 21st June 2010

### Workshop Fees:

- CS'10 - Attendees not presenting papers (includes meals and proceedings):
- Physically Present – 250 MYR (80 Euros)
- Virtually Present (Internet) – 125 MYR (25 Euros)
- IE'10 Conference and Workshop attendees - Free

- CS'10 Attendees presenting papers (includes meals and proceedings)
- Virtual and Real – 700 MYR (150 Euros)
- Registrants of main conference and workshops - free

### Poster:

If you can help us publicize this workshop, please download and display the CS'10 Poster (designed by Xiaoxia Zheng - zhengxiaoxia@hotmail.com).

### Video Introduction:

By way of an introduction to creative science, you might find the following video of a presentation from Brian David Johnson (Intel Corp., USA), given as part of the Shanghai lecture series on the 29th of October 2009, interesting:

- [Brain Machines: Robots, Free Will and Science Fiction Prototypes](#)

### Workshop Organizers:

Victor Callaghan (University of Essex, UK)  
Simon Egerton (Monash University, Malaysia)  
Brian David Johnson (Consumer Experience Architect, Intel Research Labs, USA)

### Next Year's Creative Science Workshop:

- Creative Science 2011 (CS'11)



## T-Shirt Design Contest

What happens when science fact meets science fiction?

By way of some fun, we would like to invite you to submit a simple design for a t-shirt that has the theme "what happens when science fiction meets science fact". Designs may be done in whatever tools you like but the final file should be uploaded to the CS'10 workshop paper submission system [CS'10 workshop paper submission system](#) (in JPEG (preferred) or PDF format (you can enter this competition without submitting a paper – simply upload the logo instead of a paper). The results will be announced at CE'10 where finished T-Shirts of the winning design will be distributed to workshop delegates. The competition will be judged by a team chaired by the Art & Visual Designer [Sandy Winkelman](#).

Note: the winning design was judged to be "Reflection in an eye" by Lizz Callaghan (see her [winning design](#)). Her concept was a reflection in the eye of a futuristic robot (Jimmy, in this case, from Brian David Johnson's "Brain Machine" stories). The idea was to show the interface between science in the form of the living world (us - the eye in this case) and the SciFi world (the robot). The drawing is supposed to open questions such as: is the eye that contains the reflection human; might the eye be an animal or even another machine? Is there a level of abstraction above this more literal view, might the image be an imaginative thought or a dream; is the image of the robot an idea in a designers mind; are we looking through an eye or at an eye; is this art or reality?

## SF-Prototype Competition

We are keen to encourage SF Prototypes from as wide a cross section of society as possible, ranging from school children through to retired people and so, thanks to Intel's sponsorship, we will be offering free registration to the 5 best stories/papers (so, even if you can't afford the workshop fees, submit your story as it may be awarded free registration).

## SF-Prototypes, Presentations & Videos

The following SF-Prototypes were presented at CS'10:

- 'An Introduction to SF Prototyping' by Brian David Johnson <paper>, <presentation>
- 'Exploring Science Fiction Prototypes in Persuasive TeleHealth' by Sumi Helal <INVITED TALK>
- 'SciFi as a Design Tool' by Nathan Sheddoff <INVITED TALK>
- 'Voices from the Interface' by Paul McCullough <SF-Prototype>, <presentation>, <idea> <BEST SF-PROTOTYPE AWARD>
- 'We all wear dark glasses now' by Graham Clarke and Malcolm Lear <SF-Prototype>, <presentation>
- 'Automated Eye on Nature and the Were-Tigers of Belum' by Kar-Seng Loke and Simon Egerton <SF-Prototype>, <presentation>
- 'Knowing Yourself' by Yevgeniya Kovalchuk <SF-Prototype>, <presentation>
- 'A survey in consciousness in robots and the future of reception robots' by Hossein Farid Ghassem Nia <SF-Prototype>
- Mdi by Angelica Reyes and Ruth S. Contreras Espinosa <SF-Prototype>, <video>
- 'Tales from a Pod' by Victor Callaghan <SF-Prototype>, <presentation>. This SF-Prototype story has led to real research and collaboration with a company to bring the vision to life.
- 'Brain Machines' by Brian David Johnson <story>, <presentation>



### Special Talks:

Exploring Science Fiction Prototypes in Persuasive TeleHealth  
Prof. Sumi Helal

Dr. Abdelsalam (Sumi) Helal is a full Professor at the Computer and Information Science and Engineering Department (CISE) at the University of Florida. His research interests span the areas of Pervasive Computing, Mobile Computing and networking and Internet Computing. He directs the Mobile and Pervasive Computing Laboratory at the CISE department and is co-founder and director of the Color Run Smart House, an experimental home for applied research in the domain of elder care. He led the technology development of the NIDRR-funded Rehabilitation Engineering Research Center (RERC) on Successful Aging (2001-2007), and is currently leading a new initiative on smart home based personal health and independence, funded by the National Institutes of Health (NIH).



### Special Talks:

SciFi as a Design Tool  
Nathan Sheddoff

Nathan Sheddoff is the Chair of the MBA in Design Strategy Program at the California College of the Arts (CCA). Sheddoff is one of the pioneers in Experience Design, an approach to design that encompasses multiple senses and requirements and explores common characteristics in all media that make experiences successful, as well as related fields: Interaction Design and Information Design. He speaks and teaches internationally and has written extensively on design and business issues, including Experience Design 1 and Making Meaning. Sheddoff is a serial entrepreneur, works in several media, and consults strategically for companies to build better, more meaningful experiences for their customers. Recently Sheddoff has been exploring how design influences science fiction (SciFi) and how SciFi influences design. Along with Chris Noessel they have explored interfaces and interaction design and investigated issues of styling. They have focused on the media of SciFi (TV and films) conducting a thorough analysis of interaction design in SciFi looking at visual interfaces that are completely and concretely represented, including motion and usage that describe the interaction. These SciFi interfaces oftentimes reach wide audience and have a deep cultural impact.