

## Towards pervasive adaptation

PerAda is the Coordination Action for the Pervasive Adaptation community, supporting the funded projects under FP7: FET Proactive Initiative on Pervasive Adaptation  
[www.perada.eu](http://www.perada.eu)

# PerAda newsletter

ISSUE 10, May 2011



## PerAda Activities

### **FET 2011 Conference, Budapest**

#### ***PerAda Exhibition: Pervasive Adaptation: it's here!***

Through a mixture of video and interactive displays some key research concepts will be displayed at the FET11 exhibition area. The exhibition has been organized by the PerAda Coordination Action supporting the six PerAda research projects including:

ALLOW [www.allow-project.eu](http://www.allow-project.eu)

ATRACO [www.uni-ulm.de/in/atrac](http://www.uni-ulm.de/in/atrac)

FRONTS <http://fronts.cti.gr>

REFLECT <http://reflect.pst.iflmu.de>

SOCIALNETS [www.social-nets.eu/news.php](http://www.social-nets.eu/news.php)

SYMBRION [www.symbion.eu](http://www.symbion.eu)

#### ***PerAda Project Poster***

This Pervasive Day: Creative Interactive Methods for Encouraging Public Engagement with FET Research  
*Wednesday 4 May 18:00- 19:00*

#### ***Heaven and Hell: Visions for Pervasive Adaptation***

User heaven or user hell? Technology experts in artificial intelligence, adaptive systems, ambient environments and pervasive computing discuss the technological benefits and useful applications of pervasive adaptation, but also its potential threats.

Chaired by Prof Ben Paechter, Edinburgh Napier University.

*Thursday 05 May, 11:00 Room: Brahms*

#### ***Pervasive Socio-Technical Fabric***

Leading experts in their field outline the challenges to pervasive systems research as well as looking ahead to the next grand challenge: Pervasive Socio-Technical Fabric.

Session organiser: Prof Alois Ferscha, University of Linz

*Friday 06 May 10:45 Room: Brahms*



# This Pervasive Day

Edinburgh International Science Festival



PerAda presented two public activities at the Edinburgh International Science Festival in April - an interactive exhibition and a discussion event. The science festival is a major event, attracting around 125,000 people. Both PerAda events took place at Inspace, Edinburgh.



## Talk:

### EMOTION AS INTERFACE

*Prof Kevin Warwick*

*Dr Jenny Tillotson*

*Prof Nikola Serbedzija*

*Chaired by Prof Emma Hart*

The new generation of computer systems are able to understand and alter our individual emotional states. The products we use daily - our cars, clothes and music players - will soon incorporate intelligent technologies that can adapt our environments according to our moods. A panel of experts; working at the forefront of this research debated the benefits, and possible dangers, this technology offers.

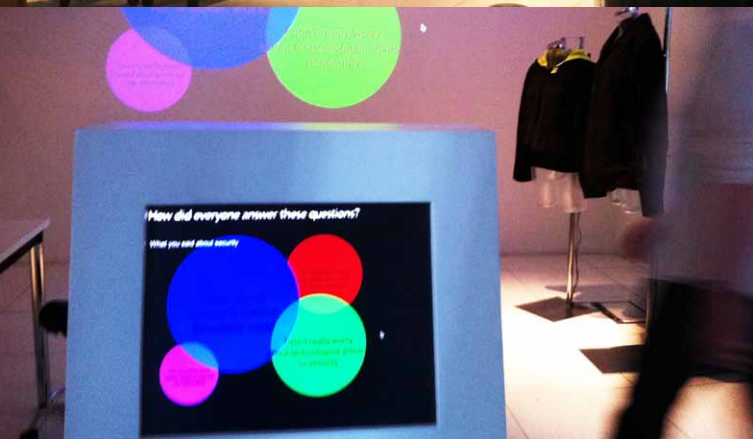


## Exhibition:

### THIS PERVASIVE DAY

Soon, wearable technology will mean that everyday items we carry on our bodies - phones, pagers and laptops - will be able to sense and alter our moods and make changes to our environments, with or without our knowledge.

This interactive exhibition explored the exciting possibilities and potential dangers.





*The London Science Museum's Dana Centre takes a fresh, no-holds-barred look at the biggest issues in science today in the stylish, purpose-built venue. The adults-only events offer you the chance to take part in exciting, informative and innovative nights connecting contemporary science, technology and culture.*



PerAda  
towards pervasive adaptation



## PerAda Talk: 17th May

### User Heaven or Techno Hell: Where are intelligent, adaptive technologies leading us?

#### Speakers:

Prof Alois Ferscha, Institute for Pervasive Computing, Johannes Kepler University, Linz

Dr Jeremy Pitt, Intelligent Systems & Networks Group, Imperial College London

Dr Oli Mival, Institute for Informatics and Digital Innovation, Edinburgh Napier University

Near-invisible computing will soon be embedded into many of the ordinary items we carry, and the spaces we inhabit. Sensing and processing technologies are becoming smaller and more powerful, enabling our daily activities, our physical conditions, and even our emotions, to be tracked and stored as data. The pervasive computing vision is one of a world where our immediate environment constantly adapts to us, allowing us to move safely and seamlessly through our lives. Our homes, workplaces, cars, hospitals and clothing will predict our needs and respond instantly to them.

Will this vision mean more convenience or less privacy? Are we prepared to trust the system to know what is good for us? Come and learn more about the science behind these technological advances, and discuss the perils and potentials of this new world of computing.

[www.danacentre.org.uk/events](http://www.danacentre.org.uk/events)

## This Pervasive Day

### Online Interactive Documentary

Visit the PerAda interactive documentary to learn about potential applications for pervasive, adaptive computing. Listen to PerAda researchers explaining their work, and have your say about the future of this transformative new technology.

[www.thispervasiveday.com](http://www.thispervasiveday.com)



# PerAda Magazine

The PerAda team commissioned 52 magazine articles from scientists around the world which discuss a wide-range of topics related to Pervasive Adaptation. These articles are written in a popular science format aimed at the well-informed public; together they provide an excellent insight into the fascinating and diverse range of research that is going in the area of Pervasive Adaptation. Individual articles can be viewed in HTML format or downloaded as PDFs from the PerAda Magazine website, [www.perada-magazine.eu](http://www.perada-magazine.eu). Additionally, all 52 published articles are now available in a single compendium which can be downloaded from <http://tinyurl.com/6955kn6>.

**If you are at FET 11, pick up a copy for free from the PerAda stand!**

# Research Agenda Book

The PANORAMA Research Agenda Book contains statements from leading scientists, heads of industry and PerAda experts, organised into distinct chapters identifying key areas for future research in Pervasive Adaptation. The book can be viewed online or downloaded in printed form from <http://www.perada.eu/research-agenda>. There's still time to contribute to the Research Agenda – log on now and have your say in defining the future directions for research in this crucial area of computing.

## Thanks to all the PerAda projects!

The PerAda co-ordination team would like to thank all the people from all the PerAda projects who have made the past three years such a rewarding time. As the project draws to a close we would like to send regards to everyone we have worked with, and wish you all great success in your future research!

The FET Proactive Initiative on Pervasive Adaptation targets technologies and design paradigms for pervasive information and communication systems, which are capable of autonomously adapting in dynamic environments. The adaptation of individual components will lead to adaptation of the system as a whole and to the emergence of new system behaviours which will be self-configuring, self-healing, self-optimizing and self-protecting. PerAda is the Pervasive Adaptation Research Network, coordinated by Edinburgh Napier University, Edinburgh, Scotland - which aims to bring researchers together to discuss and share ideas relevant to Pervasive Adaptation.

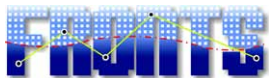


### PerAda Projects

**ALLOW**  
Adaptable Pervasive Flows  
[www.allow-project.eu](http://www.allow-project.eu)



**ATRACO**  
Adaptive and Trusted Ambient Ecologies  
[www.uni-ulm.de/in/atrac](http://www.uni-ulm.de/in/atrac)



**FRONTS**  
Foundations of Adaptive Networked Societies of Tiny Artefacts  
[fronts.cti.gr](http://fronts.cti.gr)



**REFLECT**  
Responsive Flexible Collaborating Ambient  
[reflect.pst.ifi.lmu.de](http://reflect.pst.ifi.lmu.de)



**SOCIALNETS**  
Social Networking for Pervasive Adaptation  
[www.social-nets.eu](http://www.social-nets.eu)



**SYMBRION**  
Symbiotic Evolutionary Robot Organisms  
[www.symbion.eu](http://www.symbion.eu)

[www.perada.eu](http://www.perada.eu)



Edinburgh Napier  
UNIVERSITY