



**THE CENTRE FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE IN ASSOCIATION WITH
IEEE COMPUTATIONAL INTELLIGENCE, AND SYSTEMS, MAN &
CYBERNETICS CHAPTERS OF KW SECTION PRESENTS:**

Body Movement and Touch Behaviour as Means to Recognize and Enhance Affective Experience

Speaker: Dr. Nadia Berthouze, University College London Interaction Centre (UCLIC)

Date: Friday April 25, 2014

Time: 2:00 pm

Place: University of Waterloo, William G. Davis Computer Research Centre, DC-1304

**Refreshments will be provided*

Abstract:

Recent years have seen the emergence of technology that involves and requires its users to be engaged through their body. This makes it necessary to better understand and exploit this modality to capture, respond to and regulate users' affective experience. Indeed, various studies in psychology have shown that our posture and body movement affect our emotional state, our cognitive abilities and our attitude towards the environment around us. In this talk, I will report on our studies aimed at understanding posture, body movement and touch behaviour as a means for recognizing affective states and motivation in whole-body games and in clinical contexts. I will then report on our studies aimed at investigating how body movement can be used to steer user experience providing a principled approach to the design of whole-body game technology.

Biography:

Dr. Nadia Berthouze (<http://www.ucl.ac.uk/uclic/people/n-berthouze>) is Reader at the University College London Interaction Centre. She received her PhD in computer science from the University of Milano. From 1996 to 2000 she has been a postdoc fellow at the Electrotechnical laboratory in Japan working in the area of Kansei Engineering. From 2000 to 2006, she was a lecturer in computer science at the University of Aizu in Japan. Her main area of expertise is the study of body posture/movement as a modality for recognising, modulating and measuring human affective states in HCI. She has published more than 150 papers in affective computing, HCI, and pattern recognition. She was awarded the 2003 Technical Prize from the Japanese Society of Kansei Engineering and she has been invited to give a TEDxStMartin talk (2012). She is PI on the Emo&Pain project (EP/H007083/1, 2010-2014) to design affective technology to support rehabilitation in chronic pain; co-I on the Digital Sensoria project (EP/H007083/1, 2009-2012) investigating the use of biosensors to measure subjective responses to tactile experiences; co-I on the ILHAIRE project (FET-EU-FP7, 2011-2014) investigating laughter in human-avatar interaction; EU-FP7 Marie Curie IRSES (2012-2016), UBI-HEALTH: Exchange of Excellence in Ubiquitous Computing Technologies to Address Healthcare Challenges.



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