Sensor Technologies & the Human Experience

Convening diverse thinkers for a unique conversation about sensor technologies, considered as emerging sociotechnological systems, with emphasis on actual and potential societal and individual impacts.

As sensor technologies become increasingly powerful and pervasive, what effects might this have on embodied sensation and the human experience, on the individual and societal levels?

How can sensor networks and associated functionalities be innovatively and responsibly developed?

What are the key considerations for individual and societal decision makers with respect to ubiquitous artificial sensation?

Workshop Agenda

~~~21 July~~~~

A. Opening Session

9:00-9:45
*Comprehensive introduction*
Klaus Mainzer

9:45-10:30
*Ethical and evolutionary perspectives on externalized, artificial sensing*
Kathleen Eggleson

Workshop Information

Dates and Duration
21-22 July 2015

Location
TUM Institute for Advanced Study (TUM-IAS)

Leaders
Klaus Mainzer (TUM) & Kathleen Eggleson (U of Notre Dame)
10:30-11:00 Coffee Break

B. Technical Basics (Chair: Lugli)

11:00-11:45
Sensor nodes (TBD)
Wolfgang Porod

11:45-12:30
Energy requirements for ubiquitous sensors
Steve Goodnick

12:30-14:00 Lunch

14:00-14:45
Getting Our Brain to Sense a New Body
Gordon Cheng

C. Applications (Chair: Porod)

14:45-15:30
Printing technologies for low cost sensors
Paolo Lugli

15:30-16:00 Coffee Break

16:00-16:45
Wireless sensor network enabled by energy harvesting technology for the digital agriculture
Luca Larcher

16:45-17:30 TBD
Laurel Riek

D. Societal Sectors (Chair: Eggleson)

17:30-18:15
Big Data based Governance: Autonomy and Control in Sociotechnical Systems
Sabine Thürmel

18:30-21:00 Dinner

~~~~~22 July~~~~~

9:00-9:45 Legal Concepts in the Light of modern Human-Machine-Interaction
Suzanne Beck

9:45-10:30 Corporate innovation management (TBD)
Dominik Bösl

10:30-11:15 Sensing Cities, Detecting Politics: Using Speculative Fiction to Explore Urban Life
Jathan Sadowski

11:15-11:45 Coffee Break

E. Individual Human Implications (Chair: Mainzer)

11:45-12:30 Sensors and sensibility: can we collect, store, and share ubiquitous sensor data and still protect individual privacy and identity?
Denise Baker

12:30-13:15 Linking social cognitive neuroscience with robotics for better social robots
Agnieszka Wykowska

13:15-14:00 Do Big Data Change our View of Gendered Experience? How Sensor Technologies Impact Accustomed Ontologies of Particulars and Universals
Ruth Hagengruber
14:15-14:30
   F.  Closing Remarks (Mainzer/Eggleson)

Time and Place, TBD
   G.  Writing
Available participants will gather for further discussion and writing.

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