INTERACT 2017 Workshop

Beyond Computers: Wearables, Humans, And Things -WHAT! *

Considerable attention has been paid for years to the relationships between humans and computers. But, over the years, the computer chip migrated from the computer internal organs to many other devices - to things, wearables, and even onto the skin (skinnables) and into the human body (implantables). This workshop will focus on how this revolution may affect the way we look at the relationships between humans and among humans, human elements and computing devices and what should be done to improve these interactions and "entanglements" and to understand them better.

In this workshop, we provide a platform for discussions about the relationships among humans, technology embedded in the environment (networked or not), and humans whose physical, physiological or/and mental capabilities are extended and/or modified by technology. Given these extended realities, the interface as we have known it and even the practical meaning of the word "interaction" have changed. This workshop is intended to provide a platform for scholars, practitioners, and students to think together about how to frame the new interaction, engagement, and relationship between technology, humans, "modified" humans and the new reality.

We encourage researchers and practitioners to share their ideas and experience for these new realities of interaction, engagement, and interface mechanisms with the community. Researchers and practitioners from the areas of the Internet of things (IoT), wearables, implantables, skinnables, and embedded computing are in particular encouraged to participate.

Some of the issues to be discussed by the participants are:

- Commercial things, wearables, skinnables and implantables vs. medical grade devices. What is the value to non-medical grade devices?
- Possibilities of relationships among WHATs e.g., interaction and symbiosis. Could we define a scale from minimal interaction to full symbiosis?
- Holistic views: When does a group of WHATs become a team, group of organisms, or agents?
- What makes a device smart? Are all smarts the same or are there varying degrees of smartness (e.g., a scale)?
- Could we develop a theory for SMART relationships?
- When does a wearable, an implantable, or a thing become part of the human?

^{*} The terms WHAT or WHAT! (Wearables, Humans, And Things) were coined by Nahum Gershon and Steve Mann [e.g., see "Wearables, Humans, And Things: The Veillance Games People Play", IEEE-GEM 2015, or "Wearables, Humans, and Things as a Single Ecosystem!", IEEE Internet of Things 2015].

- The interplay among various degrees of digital and analog.
- What is the role of system thinking and practice in dealing and managing arrays of WHATs?
- A broader view on experience: WHAT and the integration of senses (e.g., touch and smell).

The workshop aims at scholars and students from the domains of:

- Interaction Design
- Cognitive Science
- Visualization and Multimedia
- Artificial Intelligence and Robotics
- Developers and practitioners of wearables, implantables, skinnables and the Internet of Things
- Common sense practitioners

We invite interested researchers to submit extended abstracts of position papers dealing with the topics described above to the workshop organizers. The extended abstracts should have a length of up to 8 pages and must be submitted as MS Word document in Springer LNCS format

(see <u>http://preview.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines</u>).

Please send your submissions by email to what17@hciv.de

Accepted position papers will be presented and discussed in the workshop at INTERACT 2017 in Mumbai. Workshop position papers will be published in adjunct proceedings of INTERACT 2017.

In addition we encourage a discussion already on the Facebook page:

Wearables, Humans And Things - WHAT (https://www.facebook.com/WHAT2016/) After the Workshop, we will continue the discussions in the Facebook page and

will encourage the participants to send full papers to the organizers for publishing e.g. in a Springer LNCS book or in a special issue of a suitable journal/magazine.

Important dates:

Submission Deadline:	July 7, 2017
Notification of Acceptance:	July 21, 2017
Camera-ready Submission:	July 31, 2017
WHAT! Workshop:	September 26, 2017

The workshop organizers

Nahum Gershon, Achim Ebert, Gerrit van der Veer, Peter Dannenmann