Aware & Interactive

Albrecht Schmidt
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Invited talks at FET11
Pervasive Socio-Technical Fabric
Self-Aware Novel Interaction Techniques on PDAs

Getting Physical – my initial experience (1998)

A. Schmidt, M. Beigl, and H.W. Gellersen, There is more to context than location, Computers & Graphics, vol. 23, no. 6, pp. 893-902, December 1999

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Context-Aware Mobile Phones with sensors that recognizes its context and enable implicit interaction (1999)

(Esprit "IT for Mobility" 26900)

Context-Call and Context Phonebook
(Esprit "IT for Mobility" 26900 2000/2001)


Aware –
Everything
Some lessons learned

• Technology matters - prototyping interactive systems is essential to understand the real issues

• Software is the really hard and difficult part – not hardware

• The value (and experience) for the user is at the key factor for success

• our understanding of privacy, and what we consider private has radically changed (and is still changing)

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Mobile Devices and Applications

Equipped with many Sensors
Supporting implicit interaction
Location and context-aware Sharing context
Maslow’s Hierarchy of Human Needs

Self-actualization
- morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem
- self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging
- friendship, family, sexual intimacy

Safety
- security of body, of employment, of resources, of morality, of the family, of health, of property

Physiological
- breathing, food, water, sex, sleep, homeostasis, excretion
Vision 1
Communication and Presence, Perception
Communities of the future

(selectively) sharing a one-room-apartment with all your “friends”
100 Million Experiences collected and shared in real time
Was machst du gerade?

Florian Alt
Our plane to Vancouver

vor etwa einer Stunde via Android · Gefällt mir · Kommentieren · Teilen

Simon Bös
a smell Dash-8
vor 33 Minuten · Gefällt mir

Schreibe einen Kommentar ...

Bastian Pfleging
Waiting standby for the next flight to YVR (Vancouver) ;)

vor 2 Stunden · Gefällt mir · Kommentieren

Stefan Sonnenberg
Good luck ;-)· Gefällt mir

Bastian Pfleging
Just got the boarding pass... Without paying the 100 extra fee ;)

vor etwa einer Stunde · Gefällt mir

Schreibe einen Kommentar ...

Wirb auf Facebook
Informiere über 500 Mio. aktive Nutzer auf Facebook über dein Unternehmen. Sprich dem Publikum an und entwickle so deine Marke online.

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Albrecht Schmidt

Just standing next to an "Ancient pillar of computing beyond the desktop"... according to Alois Perscha (won't tell you who the ancient pillar is...)
Scenario
100 million people stream their 1st person view in real-time

Support for real-time as well as archive access

Indexed by location, co-location, events, context-information, …

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Vision 2
A Predictable World
Looking into the future

Making our life – and the world in general – more predictable
Perception beyond the Here and Now

By the middle of the century the boundaries between direct and remote perception will become blurred. By the it will be hard to discriminate real-time perception apart from historic content or future predictions.

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Perception beyond the Here and Now

Masses of networked sensor-equipped computing devices are overcoming longstanding temporal and spatial boundaries to human perception
Perception beyond the Here and Now

Ethics and values are the central design material of this century
Summary

- Blurring boundaries of perception
- Overcoming fundamental temporal and spatial boundaries to human perception
- Considering ethics as design factor
Questions?
Comments?

- Visit my websites at: http://albrecht-schmidt.blogspot.com/
- Recent articles in IEEE Computer
  - Ubiquitous Computing – are we there yet? (2010)
  - Perception beyond the Here and Now (2011)