

# HCCS ADVANCED TOPICS

AUTUMN TERM 2006

## Week 2 Readings – Ubiquitous computing - Introduction

**Rationale:** These papers give an introduction to the field of Ubiquitous Computing. Mark Weiser's paper introduced the vision and is about the most frequently cited – but many have misunderstood the notion of 'invisible computing'. The Abowd and Mynatt paper gives an excellent overview of research issues, relevant concepts and terms that you will keep seeing in other literature. It also raises the issue of the importance of evaluating UbiComp applications and social implications.

### 1. Read these two papers and be prepared to discuss them [ALL].

Weiser, M. "The Computer for the 21<sup>st</sup> Century" *Scientific American*, September 1991. <http://www.ubiq.com/hypertext/weiser/SciAmDraft3.html>

Abowd, G. D., Mynatt, E. D. (2000) "Charting Past, Present, and Future Research in Ubiquitous Computing". *Transactions of Computer Human Interaction*, Vol 7:1, pp. 29-58.

<http://www.cc.gatech.edu/fce/pubs/tochi-millennium.pdf>

### 2. Find at least one other paper or project [ALL]

Be prepared to say a sentence or two about what you have found:

e.g., Look at one of the Interact Lab Equator projects, e.g., Chawton House, Ambient Wood, Hunting the Snark - <http://www.cogs.susx.ac.uk/interact/projects/equator.htm>

e.g., Find another paper or project and try to get an impression of what kind of research is being done.

*Tips:* Follow references at the end of a paper to find another paper; do a citation search looking for more recent papers that have cited one of the above papers; search journal or conference proceedings such as the ones below; search for other publications by the same authors; look at work of particular research groups.

#### Journals:

- Personal and Ubiquitous Computing <http://www.personal-ubicomp.com/>
- Papers also distributed across many HCI / CSCW journals, e.g., see digital library at [www.acm.org](http://www.acm.org) [also available via Sussex Library site]

#### Conferences:

- UbiComp eg <http://ubicomp.org/ubicomp2006/>
- Pervasive eg <http://www.pervasive2006.org/>

#### Other:

- more Mark Weiser papers <http://sandbox.xerox.com/ubicomp/>
- some ubiquitous computing research centres (incl Equator @ Sussex) [http://en.wikipedia.org/wiki/List\\_of\\_ubiquitous\\_computing\\_research\\_centers](http://en.wikipedia.org/wiki/List_of_ubiquitous_computing_research_centers)
- 'ubiquitous computing' wikipedia entry also gives reasonable links [http://en.wikipedia.org/wiki/Ubiquitous\\_computing](http://en.wikipedia.org/wiki/Ubiquitous_computing)