## **Exercise 1 – Mensch-Maschine-Interaktion 1**

## Research

(Individual homework, 1 week)

Write a short report (2 - 4 pages) about one of the following topics:

- 1. Adaptive Interfaces
- 2. Augmented Reality
- 3. Child Computer Interaction
- 4. Context Awareness
- 5. Cross-Cultural User Interface Design
- 6. Eye tracker
- 7. Human-Robot Interaction
- 8. Interaction in the Automobile
- 9. Interactive displays
- 10. Mobile User Interface Design
- 11. Multi-Display Environments
- 12. Multimodal Interaction
- 13. Shareable Displays
- 14. Speech and Vocal Interaction
- 15. Tactile and Haptic User Interfaces
- 16. Tangible User Interfaces

- 17. Text entry
- 18. Ubiquitous Computing
- 19. Usability
- 20. Virtual Reality
- 21. Projector Phones
- 22. Interaction with Tabletop Displays (e.g. MS Surface)
- 23. Computing for the Elderly
- 24. Gesture Input
- 25. Domestic Computing
- 26. Robot Control
- 27. Location Based Services
- 28. Context-aware Computing
- 29. Ambient Interfaces
- 30. Sensor Networks
- 31. Privacy for Mobile Computing

The content should include:

- A short description of the topic
- A history review:
  - o When was the topic first mentioned in scientific research?
  - o How did scientific interest change over time?
  - o How did popular interest change over time?
- The most recent developments / research approaches
- The two or three most important publications and a summary of their content

The report should contain aggregated data, a short analysis, and a description of the methods you used to collect the data. Use figures to illustrate your findings. Additionally, document all the sources you used (including pictures).

## **Submission:**

- Send your solution to your tutor by email. Use an attachment named exercise1-<cip-Kennung>.pdf. Use the email subject "mmi1 exercise 1 <cip-Kennung>".
- The attachment must contain the following:
  - o The research report (PDF format)
- **Deadline:** 06.05.2009, 12:00 (noon).