Main Area:
User Interface Design for Small Mobile Communication Devices

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Description
I am interested in the time when wireless communication devices will become so small that real estate for the user interface will be the main design issue. I envision a base wireless communication device that can fit easily, e.g., on a finger ring. How will the user interact with such a device? My current hypothesis is that the user interface has to be modular (user interface elements, either local worn on the body or part of the environment, are linked dynamically and wirelessly), multi modal (user and device both can select the appropriate input and output modes, e.g., speech, keyboard, vision, gesture), the device itself context sensitive (since user will likely perform other tasks simultaneously, having her undivided attention is not likely anymore, and therefore the device has to adapt and adjust the possible cognitive loads put on her), and probably a content transcoder.

Publications from the following three bigger areas could contribute to my main area:
- Small devices user interface design. Within this area, my focus is on non-conventional input and output options, e.g., mobil multimodal.
- Mobile communications: devices and technologies. Device specific studies, telecommunication related things.
- Context: psychological issues like divided attention, social and attentive state.

Written Requirement
The written requirement for this area will consist of a publishable quality paper.

Signature: ______________________________     Date: _____________
The online version of this reading list contains links to most of the papers, as well as some abstracts: http://www.media.mit.edu/~stefanm/generals/

Reading list
The reading list is structured in three sub areas.

User Interfaces for Small Devices and Multi-Modality


**Context and Attention**


**Mobile Communications**


