

Interactive UbiSociety: Combining Ubiquitous Computing and Human-Computer Interaction for Constructing a Human-Centered Intelligent Society

Nowadays, with technical progress in artificial intelligence, the paradigm of human-computer interaction has been deeply improved. Generally, HCI focuses on improving interaction efficiency and user experience by designing novel techniques, however, traditional interaction techniques encountered many difficulties in today's intelligent society, especially when dealing with complex daily environment. To tackle this problem, a recent idea is to combine the sensing ability of ubiquitous computing devices with innovative interaction techniques, which has the potential to deeply transform classical human machine systems.

In today's society, there are many scenarios requiring more advanced input and output technologies. For example, the commonly used smartwatches provide us a novel computing space for sensing human activities and then design on-body interaction techniques. Such advancement in hardware urges researchers to focus more on combining human-centered design methods with ubiquitous computing abilities. But at the same time, since there is still a gap between hardware design and AI-based intelligent interaction technologies, especially when the boundary of ubiquitous computing and human-computer interaction is still unclear, designing novel HCI technologies based on ubiquitous computing is not a easy task. Therefore, this workshop would like to provide a platform to discuss how to combine ubiquitous computing with human-computer interaction, which especially focus on innovative research for constructing a human-centered intelligent society.

Topics of Interest (but not limited to):

- Intelligent interaction techniques
- Input/output techniques
- Intelligent data visualization
- Accessibility
- On-body sensing and interaction
- VR/AR
- Wearable devices

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