Research Topics

Human Computer Interaction

Research areas: interaction techniques and design, prototyping, and evaluation of user interfaces. Topics: computer-supported cooperative work; audio, speech, and multimodal interfaces; tangible interfaces; haptic interaction (a haptic interface is a force-reflecting device which allows a user to touch, feel, manipulate, create and/or alter simulated 3D objects in a virtual environment); mobile interfaces; universal usability (devices that can be used by any user including children, elderly, and persons with handicaps); human motor capabilities (Fit’s Law); user interface complexity.

Adaptive Interfaces

Research areas: design, prototyping, and evaluation of adaptive interfaces. Topics: audio, speech, and multimodal adaptive interfaces; intelligent tutors (adaptation to learning), system use (i.e. a system that help users work more efficiently: organizing e-mails, providing less movement of the mouse, tailoring the interface to the user’s interests); supporting information acquisition/decision (i.e. recommending products), adaptation to affect/motivation/engagement; assistive technology (i.e. adapting to people with handicaps).

I found on Internet a page of research topics for undergraduate students for University of Princeton (see if it will work): <http://www.cs.princeton.edu/academics/ugradpgm/topics.php> .