Demonstration of Mobile Devices for Control

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My invited talk for the Mobile HCI'02 conference will feature a discussion of the applications created as part of the Pebbles research project. Pebbles is exploring the many ways that mobile devices such as Palm Personal Organizers or Pocket PC / Windows CE devices, can serve as a useful adjunct to the "fixed" computers in the user's vicinity. With today's and tomorrow's wireless technologies, such as IEEE 802.11, BlueTooth, RF-Lite, and G3, mobile devices will frequently be in close, interactive communication. The talk will include demonstrations of some of these applications, and the demonstration session will provide opportunities to see the applications up close and to try them out themselves. The applications to be demonstrated include:

- **SlideShow Commander**: which allows PDAs to be used to control Microsoft's PowerPoint. The picture and notes of the current slide are displayed on the PDA, or a list of slides can be presented. You can scribble on top of the thumbnail picture and the scribbles will appear on the PC screen. It is easy tap on hyperlinks or embedded movies on the slides, to switch to demonstrations and back to PowerPoint, or to preview slides without showing them to the audience.
- **Remote Commander**: which allows one or more PDAs to be used as if they were the PC's cursor and keyboard. This program is useful in meetings to promote collaboration, and also useful for some handicapped people who cannot use a regular keyboard and mouse. You can also view screen shots on the PDA to better see what you are doing.
- **Remote Clipboard**: RemoteClipBook and RemoteClipHack are a pair of Pebbles applications that cut-and-paste text between your Palm and a PC, and open hyperlinks from your Palm on the PC.
- **ButtonScroll, RateScroll, and SlideScroll**: These application allow the PDA to be used to scroll the current window on the PC, instead of using the regular scroll bars. A user study showed that this can be faster than other scrolling methods.
- **Personal Univeral Controller (PUC)**: We are doing research on how to use the handheld as a remote control device for appliances such as stereos, telephones, VCRs, TVs, ovens, copiers, etc. A user interface will be automatically generated on the handheld from a high-level specification supplied by the appliance.

See my paper in the main conference proceedings for more information on Pebbles and pictures of these applications.