Next Generation User Interface Technology for Consumer Electronics

ACM SIGGRAPH Workshop – May 2004 – Snowbird, UT
SIGGRAPH Panel – August 2004 – Los Angeles, CA

Overview

As the power and complexity of consumer electronic devices continues to increase, the difficulty of the user experience also increases. If VCRs still flash 12:00, just think what will happen with the new generation of devices. The technology in the new consumer devices rivals the CPU and graphics horsepower of workstations of only a few years ago. The purpose of this workshop is to investigate the application of existing tools and techniques from other disciplines to the next generation of consumer devices.

The problem domain for this workshop includes:
- Dealing with large quantities of information, e.g. extremely large music and video libraries, photo albums, program schedules, etc.
  – Can we leverage some of the work of the SciViz community?
- Creating a comfortable user experience – Games and CGI?

Given the power of the CPU and graphics being designed into the next generation of devices is it possible/meaningful/useful/appropriate to exploit such technologies as:

- OpenGL / DirectX
- Haptic Devices
- Game Engines
- Augmented Reality
- Parallel processing
- Story Telling Interactivity

In addition to advancements in technology, while each of the CE vendors wish to maintain the identity of their products, there is a pragmatic need for overall interoperation. Just as automobile manufacturers have standardized on the basics for interaction, there is still plenty of room for product differentiation in the marketplace.

As we are about to step off into a new world of human interaction with electronics devices in our daily lives, it is important to begin to address the means for creating an effective and enjoyable user experience.

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