Stay Tuned! (An Adventure in Universal Remote Control Redesign)

In the paper “The Work To Make a Home Network Work,” the authors found that universal remote controls, although intended to be a replacement for single-device remotes, often did not live up to their promises. According to the authors,

“Universal remotes worked for a few members of some households—typically those who told us that they understood the programming model of the remote itself. A surprisingly large number of householders, however, used the universal remote in conjunction with at least one other remote.”

For this project, you will investigate these three questions:

1. If universal remotes are intended to be a replacement for countless remote controls that most households own, why are people keeping around single-device remotes and using them in conjunction with the universal remote?

2. Since universal remotes are typically programmed by a single person, how do other members of a household understand and use the universal remote compared to the remote programmer?

3. How would you design a universal remote control that would meet the needs of multiple users in a household?

Your mission, should you choose to accept it…

- Familiarize yourself with programmable universal remote controls. Read about them online and check them out at an electronics store. If you have friends or family members with universal remote controls, convince them to let you play with their remotes.

- Interview people in households that own universal remotes.
  - Develop an interview guide. Some things you may want to keep in mind include (but are not limited to):
    - Interviewing people in their homes is essential for this study.
    - Be sure to have people show you how they use remote controls to complete tasks.
    - Be sure to ask about remote control usage, experiences programming remotes, understanding/misunderstandings about remotes

- Gain IRB approval for your study.

- Find multi-person households owning universal remote controls willing to participate in your study.

- Interview your participants. Be sure to talk with ALL members of the households you are studying!

- Analyze your data
Based on your data, create a prototype of a redesigned remote control. It doesn’t have to actually work, but should show the major components of your design.

**Project Deliverables**

- Research Data
- Remote control prototype
- An N-page paper describing your analysis and redesign.