# Invited SIG: Designing for the Living Room TV Experience

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# **Abstract**

This SIG brings together practitioners and academic user researchers and designers who are interested in or working on defining both the software and hardware aspects of the user experience for TV. This SIG will be useful to people at all stages ranging from early research to released products. We especially welcome people from product labs.

# **Author Keywords**

10 foot experience; tv; smart tv, social; tv browser; app development; interaction design; user studies for tv; understanding living room; designing for tv

# **ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

### **General Terms**

Design, Human Factors, Theory

### Introduction

Today, more American households have TVs than cell phones or tablets, and the smart TV adoption is projected to grow from 2 million in 2010 to 43 million by 2014 [1].

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Designing for TV differs from designing for phones, tablets, or computers in important ways. For example, TV experience has traditionally been a lean-back experience where users' are not actively interacting with the system whereas phones, computers, and tablets tend to be used for more interactive purposes. Phones and tablets often provide the users with direct manipulation interfaces whereas the TV is used with a remote control at a distance of 10 feet. Furthermore, TV is a device that is commonly shared with all the members of the household. Phones, on the other hand, tend to be personal; and tablets and computers can be shared to a varying degree.

Although the differences outlined above seem to call for different approaches when designing the user interface and the overall experience with the different technologies, the surface-level differences might not hold as we move towards smarter and more integrated TV experiences. Today, smart TVs include applications that vary in the level of interactivity they offer or require from the users. Although TVs are still mostly used from a distance of 10 feet, the interaction patterns are changing rapidly and TV is frequently used together or at least in parallel with tablets, phones, and computers. TV may well continue to be a shared device, but do we need to move towards more active user-management when more personal apps are installed on our TVs?

### Goals of the SIG

The theme of the CHI 2012 conference is "It's the Experience". We believe the future of living room is really about integrated smart social experience. To accomplish this goal there is a need for the leaders in each of these areas to share their understanding and

ideas. By working together we can connect technologies and ideas to identify the opportunities and challenges, and to stretch the limits of creating a compelling living room experience.

The overall goal of this special interest group is to initiate a community of researchers and practitioners who are interested in this topic to exchange information and experiences, and form collaborations on specific projects.

One concrete result will be a shared wikispace website for this community which will be initialized before the SIG meeting and extended during and after the meeting by all the participants.

The initial plan is for this website to include:

- Links to relevant literature, conferences, and other events
- Pages for individuals and groups on which they can describe their own experiences with designing for TV
- A discussion forum for discussions related to the interests of the community

## Issues and questions to be addressed

- What is smart TV? Is it enough for the TV to have apps or an Internet connection to be called smart?
   Can TV be a smart TV without separate apps?
- What apps are compelling in the living room? How does design of these apps differ from designing them for mobile phones or tablets?
- Living room is a place for relaxation and lean-back entertainment. What are the design principles for creating experiences that enhance a relaxing entertainment-focused atmosphere?

- TV is a shared resource. How do we design for the social need of watching together and sharing?
   How about watching remotely and sharing with the world? How do we ensure privacy?
- What are the UX metrics for the living room?
  Clearly standard metrics like efficiency don't apply. How do we measure "entertaining"?
- What are the user research methods and design principles that work in the living room context?
- How do we design for experiences that span across devices (e.g., tablet companion apps for TV)?
- How do we design for and study the ways for interacting with the TV (from physical remotes to interfaces controlled by gestures)?
- How do different countries and cultures differ in how they consume entertainment in their living rooms? How do we design for the global audience?

# Organizers' background

Jhilmil Jain is a Sr. UX Researcher at Google. Prior to that she was a Sr. UX Strategist at Microsoft, and before that she was a Sr. UX Lead at HP Labs. At Microsoft, she led user research and usability efforts for the speech@microsoft product group. At HP Labs she led UX efforts for multiple business incubations. She has several publications and patents in information visualization, user research, multimodal interaction modeling, personal information management systems, and experimental evaluation. She has served as the program chair for CHIMIT 2009; on the program

committees of various conferences such as CHI, HCII, and UPA; on the editorial board for the International Journal of Handheld Computing Research; on the review boards for two books "Handheld Computing for Mobile Commerce" and "The Psychology of Facebook"; and is currently serving a third term as the UX community chair for CHI 2012. She is a member of ACM, UPA, Phi Kappa Phi, and Upsilon Pi Epsilon.

Anne Aula is a Staff User Experience Researcher at Google. Prior to joining Google in 2006, she worked as a usability analyst and taught a number of different HCI courses at University of Tampere, Finland. She finished her MA in Psychology in 2001 and her PhD in Interactive Technology in 2005. Dr. Aula has published a number of articles on information search, eye-tracking, and mobile business services. This year, she is serving a second term as the CHI Student Research Competition co-chair. At Google, she first worked as the lead researcher on a number of different Google Search features before moving on to lead user experience research on AdWords. She joined the Google TV team in early 2011.

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