

# The Magician's Assistant

Kevin Tassini  
Carnegie Mellon University

# Context-Aware Technology

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- Collecting data to help systematically predict the user's state (GPS, accelerometer, microphone, time).
- Providing services that are personalized to the user based on their context.
- Types of data we can gather is getting greater and more sophisticated everyday.

# About the Author

Context-Aware Technology

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~~Context Aware Technology~~

# About the Author

- HCI Researcher @ Carnegie Mellon University
- User experience research/ethnography.
- Applying HCI (interaction design and user experience principles) to the public health domain, particularly in the area of public health.



# Carnegie Mellon



• Human-  
Computer  
Interaction  
Institute

Ubicomp  Lab



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Computer  
Interaction  
Institute

Ubicomp  Lab



Ubicomp 

Ubicomp  Lab

# Ubicomp

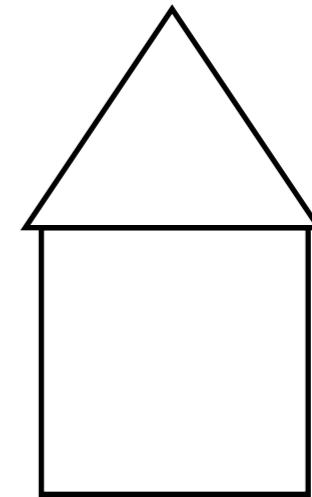
- Anind Dey
- Ian Li
- Maria Brooks
- Scott Davidoff
- Gabriela Marcu
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# Potential Benefits

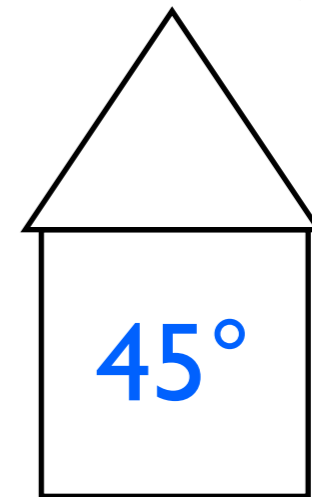
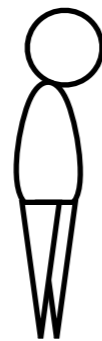
- Predicting context to improve energy efficiency.



Christian Kohler, Automatic Thermostat Control and Behavior Modification, Ongoing Work.

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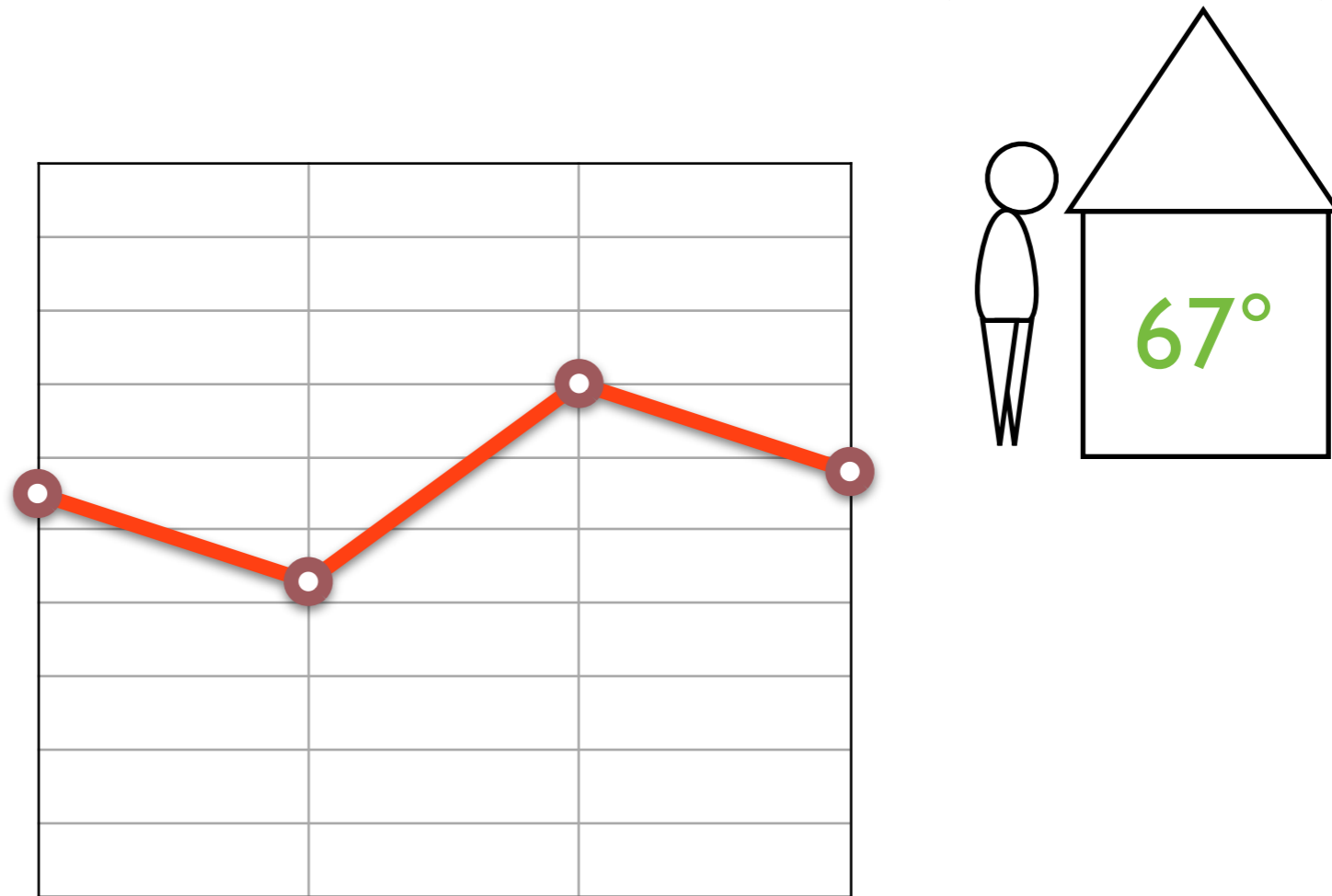
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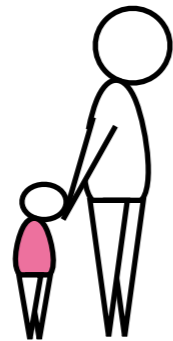
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# Potential Benefits

- Predicting context to improve efficiency and ability to manage routine.

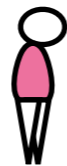


Scott Davidoff, Routine as Resource for the Design of Learning Systems, PhD Thesis, Carnegie Mellon University, Advisors: Anind K. Dey, John Zimmerman, Scott Hudson, Gregory Abowd



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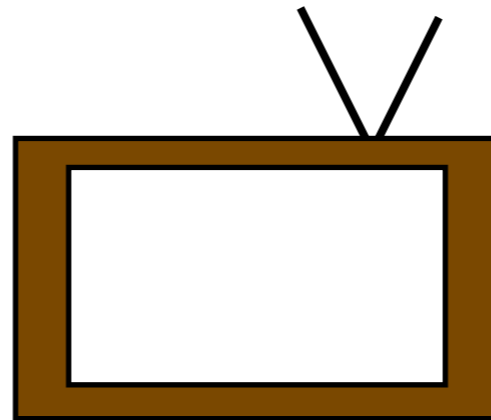
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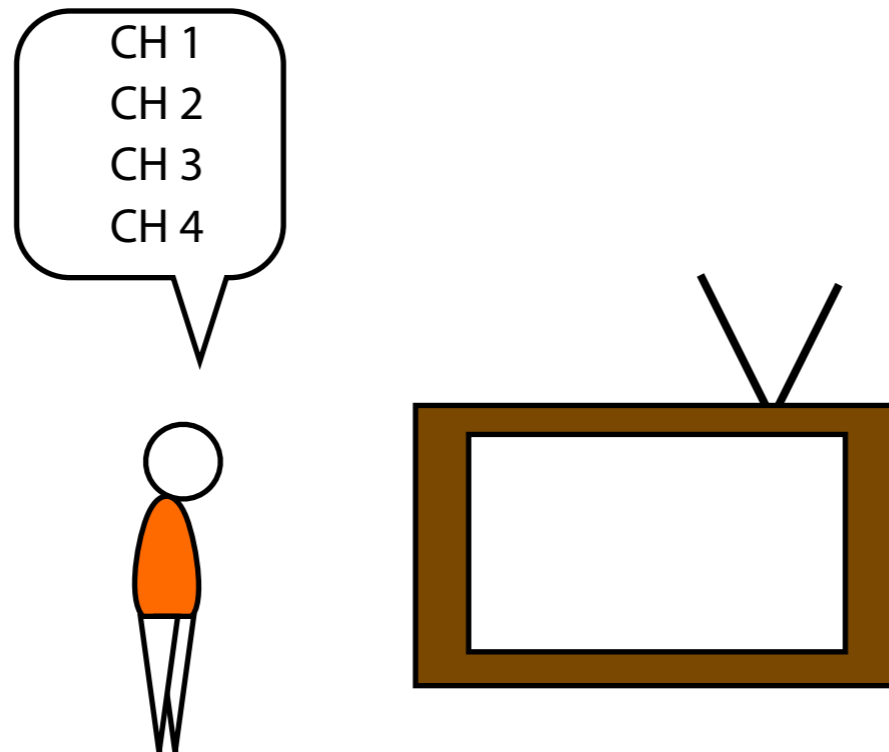
- Improving social interactions.



Y. Oh, C. Shin, W. Jung, W. Woo, "The ubiTV application for a Family in ubiHome," In: 2nd Ubiquitous Home workshop, 2005, pp. 23–32.

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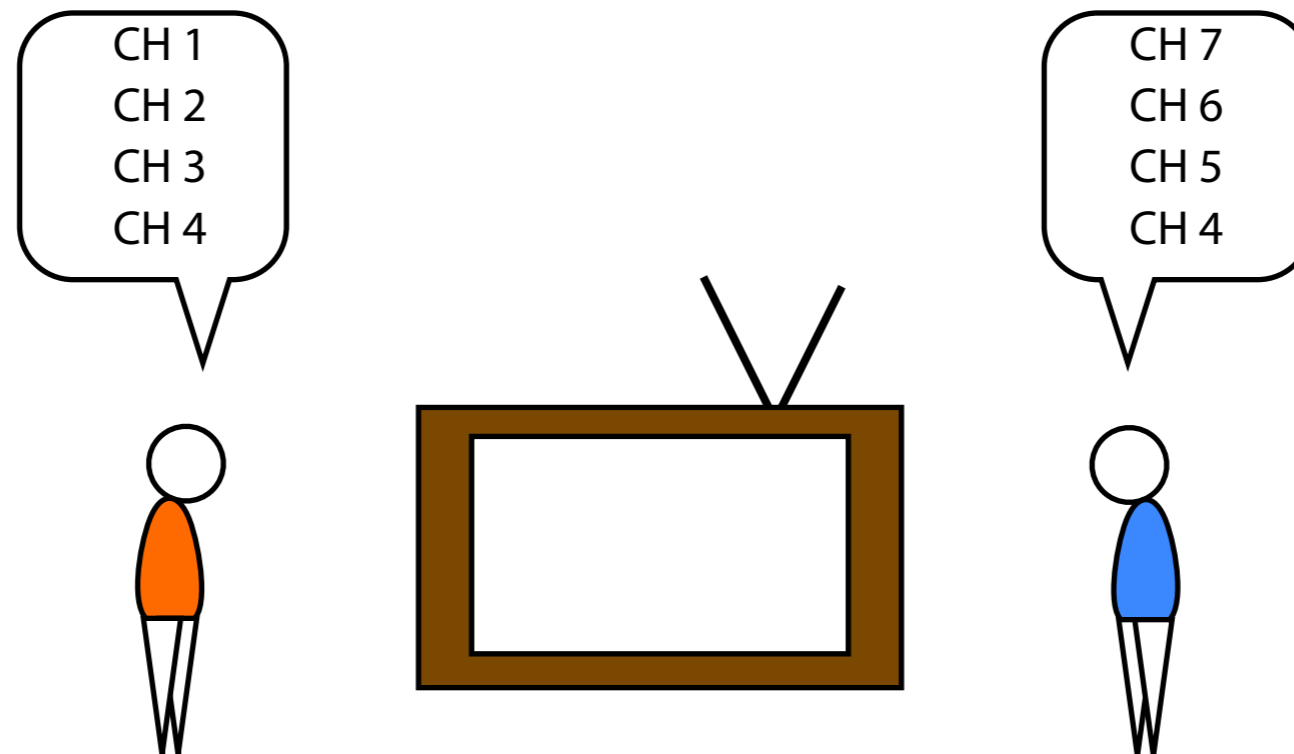
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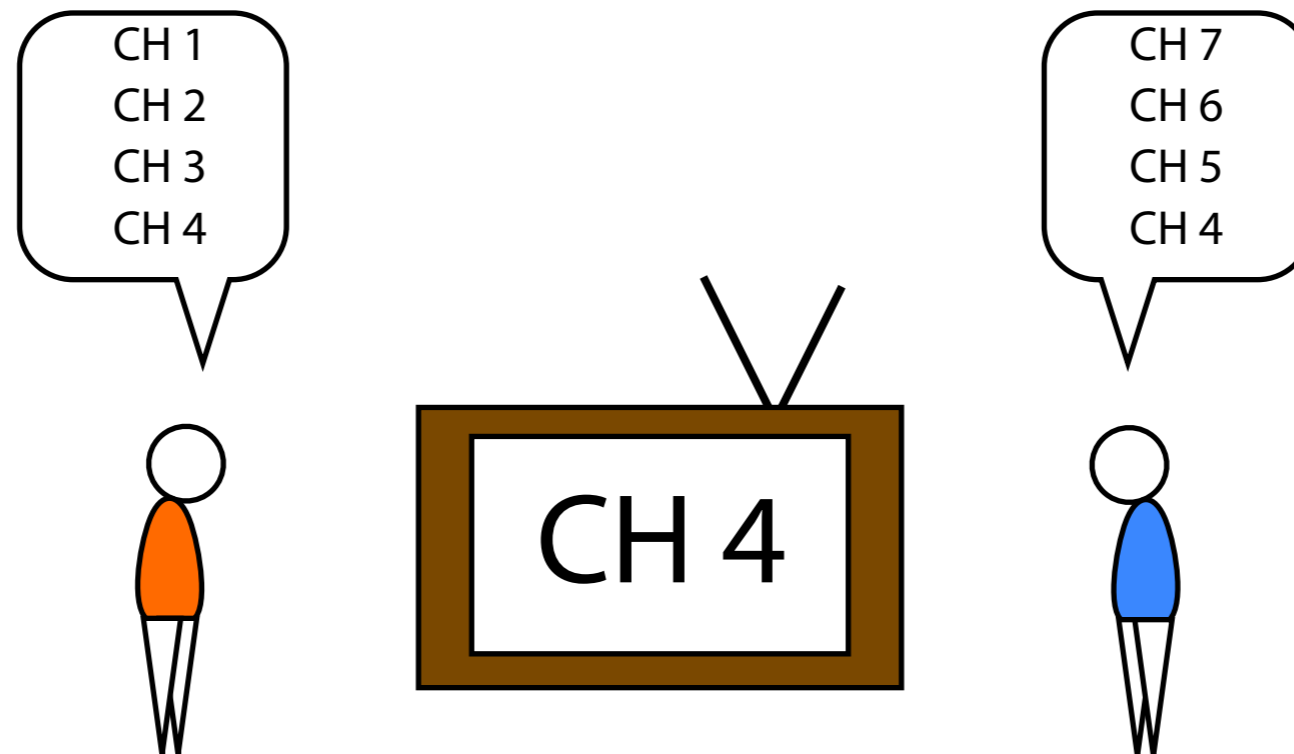
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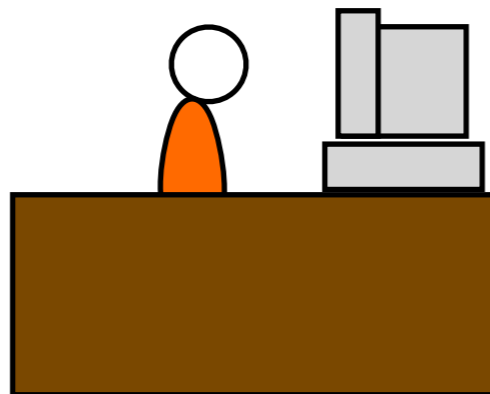
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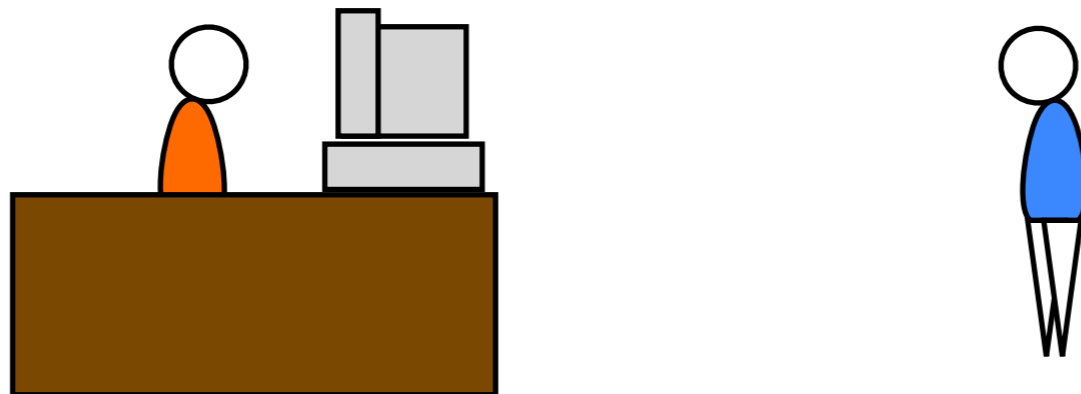
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# Science Fiction Prototype

- Vernon uses context-aware technology throughout the day from the moment he wakes up. It communicates to him through a “lithe and lilted” female voice and he calls her Becca.
- Becca controls everything Vernon does throughout the day from the moment he wakes up.



# Science Fiction Prototype

- In a world where context-aware technology is commonplace, and presumably effective, what will the implications be for the user?
- As developers of these technologies, what is our role versus the role of the user?

Thank You.