## Research Lecture/Seminar Summary:

## **Human-Centered Computer Security: Beyond The Desktop**

I attended this seminar on human-centered computer security presented by Tamara Denning, which was very informative and interesting. Her focus was definitely on how computers interacted with humans and gave rise to a need for more mindful implementation of technologies because of the various new ways that people can be attacked via technology. She asked the questions: "How can people be hurt?" "What do people want?" in order to figure out motives and how an assailant might approach a technological attack. One of her projects involved household robots with Audio/Visual feeds that were accessible over the Internet. These robots could be controlled via a remote location and, if compromised, could be used for a variety of attacks including: spying, minor property damage, tripping elderly relatives, knocking over objects around infants. Additionally, there were several technical security vulnerabilities, including being able to eavesdrop on audio-visual feeds, login credentials, or possibly being used as a man in the middle attack (I did not know what a man in the middle attack was while I was listening to the lecture, but afterwards I searched it up and apparently it is an attack where the attacker secretly relays and possibly alters the communication between two people/entities who believe that they are directly communicating with each other – a very insidious form of attack). Tamara also explained that we couldn't secure every technical vulnerability because of the costs associated. One oversight I think is that she used very specific cases to explain about technological vulnerabilities but did not focus as much on human interaction or understanding of the technology.