Augmenting Designers: Developing tools and methods to help designers do what they do better

ABSTRACT:
Recent advances in technologies such as conversational agents, robotics, machine learning, mixed reality, and the internet-of-things are allowing designers to create more interactive and intelligent products and services. These technologies bring up new questions around human-machine interaction and require designers to understand new skills and new domains. Beyond changing what designers create, these technologies can also change how designers work through tools and methods that incorporate these new technologies. As a new faculty member in the HCII, I am building up a lab to 1) understand the needs of designers creating future technologies, and 2) develop new tools and methods to augment designers’ capabilities. In this talk, I will be showing some of my prior motivating work developing new methods for remote observation and interaction prototyping. I will then dive into some new projects exploring new tools to support designers including, assisting user researchers with AI analysis tools, promoting conversations among design teams, and building tools for designing the interactions that machines have with people.

BIO:
Nik is an Assistant Professor at Carnegie Mellon's Human-Computer Interaction Institute. His lab focuses on augmenting designer’s capabilities through the use of new technology and design methods. His interest in developing new ways to support designers stems from my interest in creating interactive and intelligent products. Nik blend a background in product design methods, interaction design, human-robot interaction, and mechatronic engineering to build tools and methods that allow designers to understand people better and to create more human-centered products. Before moving to the HCII, Nik was a researcher in the Digital Experiences group at the Accenture Technology Labs. He graduated with a Ph.D. in Mechanical Engineering from Stanford’s Center for Design Research where he was co-advised by Larry Leifer and Wendy Ju.

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