HUMANITY CENTERED ROBOTICS INITIATIVE

BROWN

Jeffrey Bigham
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Research Talk:
"Transitioning Crowd-Powered Systems to Computation"

Monday, September 28, 2015
2:00 – 3:00 pm
CIT Building, Lubrano Conference Room, 477

Over the past few years, I have been developing and deploying interactive crowd-powered systems that solve characteristic "hard" problems to help people get things done in their everyday lives. For instance, VizWiz answers visual questions for blind people in seconds, Legion drives robots in response to natural language commands, Chorus holds helpful general conversations with human partners, and Scribe converts streaming speech to text in less than five seconds. In this talk, I'll overview that work, and then discuss ongoing work in transitioning from crowd power to computation in domains such as (i) ubiquitous sensing, (ii) speech recognition, (iii) conversational assistance, and (iv) vision.

Jeffrey P. Bigham is an Associate Professor in the Human-Computer Interaction and Language Technologies Institutes in the School of Computer Science at Carnegie Mellon University. He uses clever combinations of crowds and computation to build truly intelligent systems, most often with a focus on systems supporting people with disabilities. Dr. Bigham received his B.S.E degree in Computer Science from Princeton University in 2003, and received his Ph.D. in Computer Science and Engineering from the University of Washington in 2009. From 2009 to 2013, he was an Assistant Professor at the University of Rochester, where he founded the ROC HCI human-computer interaction research group. He has been a Visiting Researcher at MIT CSAIL, Microsoft Research, and Google[x]. He has received a number of awards for his work, including the MIT Technology Review Top 35 Innovators Under 35 Award, the Alfred P. Sloan Fellowship, and the National Science Foundation CAREER Award.