HUMANITY CENTERED ROBOTICS INITIATIVE

BROWN

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"Engineering Robust Robot and Autonomy Design in the Face of the Prevalence Paradox"

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Noon-1:00
CIT 477 Lubrano Conference Room

Abstract: Autonomy is growing ever more reliable, increasingly able to free humans from everyday tasks. There is, however, an ironic difficulty: as autonomy takes over any given task, humans become less and less able to perform the task themselves. Indeed, autonomy renders humans more likely to fail the closer it comes to perfection, even as in absolute terms it protects the user. Under this "Prevalence Paradox" in which machine success sows the seeds of human failure, what implications must exist for trust in human machine teaming? Join Dr. Ben D Sawyer as he turns the findings in his recent Human Factors Prize-winning paper, "Hacking the Human: The Prevalence Paradox" toward robotics and autonomy. Then, discuss potential design interventions, the future of work at the intersection of human performance and machine design, and the coming shape of human machine symbiosis.

Ben D Sawyer, PhD, MSIE is a Postdoctoral Associate at MIT AgeLab. There he leads and contributes to industry consortiums, performing cognitive modeling of attention in a variety of real-world contexts including autonomy, surface transport, typography, and cyberdefense. Dr. Sawyer has been repeatedly awarded for his work at the intersection of cognition and engineering. He is the recipient of the 2017 Human Factors Prize, a 2018 US Air Force YIP, and was a Repperger Scholar with the USAF 711th Human Performance Wing's Applied Neuroscience Unit and BATMAN Command. His present work is supported by the US Air Force, Google, Jaguar Land Rover, Monotype, and others. For more information, visit bendsawyer.com.

Host: Elizabeth Phillips/HCRI