



HUMANITY
CENTERED
ROBOTICS
INITIATIVE



BROWN

Madeline Gannon NVIDIA

“Empathic Interfaces for Autonomous Machines”



Thursday, February 7, 2019
12:00-12:50
CIT 477 Lubrano

Abstract: In this talk, Dr. Madeline Gannon shares her recent research developing human-centered interfaces for fabrication machines. She discusses how to deploy empathic interfaces that harness a robot’s body language for legible, low-level communication with non-experts. Through her work, she illustrates how human-centered design can reconfigure existing tools of automation to enhance, augment, and expand human capabilities — not replace them. Finally, she concludes with a series of computational techniques for transforming giant, industrial robots into living, breathing mechanical creatures.

Dr. Madeline Gannon is a multidisciplinary designer inventing better ways to communicate with machines. In her research, Gannon seeks to blend knowledge from design, robotics, and human-computer interaction to innovate at the intersection of art and technology. Her work has been internationally exhibited at leading cultural institutions, published at ACM conferences, and widely covered by diverse media outlets across design, art, and technology communities. Her interactive installation, *Mimus*, earned her the nickname "The Robot Whisperer", and was awarded a 2017 Ars Electronica STARTS Prize Honorable Mention. She is a 2017 & 2018 World Economic Forum Cultural Leader, and was a featured artist at the 2018 World Economic Forum Summer Davos. Gannon holds a PhD in Computational Design from Carnegie Mellon University, where she explored human-centered interfaces for autonomous fabrication machines. She also holds a Masters in Architecture from Florida International University. Gannon recently joined the new robotics division at NVIDIA, where she is developing computational design tools for Human-Robot Interaction.

Host: Peter Haas/HCRI