Abstract

Art and technology have a similar origin, but since 18th century they have been separated from one another (e.g., in Romanticism). However, with the rapid technological advancement, art and technology seem to be reintegrated. Specifically, we see considerable effects of computing and technology on art and aesthetics. On the contrary, relatively little effort has been put to investigate the potential effects of aesthetics on computing. Aesthetic Computing started to address this aspect. Aesthetic Computing is defined as “the application of art theory and practice to computing”. In this talk, after providing an overview of my program of research, I will introduce my perspective on art and aesthetic computing. Then, a few projects are highlighted with a focus on the integration of art and technology: interactive sonification platform for performing art and dance; driving-sonification for promoting fuel efficient driving and reducing aggressive driving; musical robots to facilitate social interactions of children with ASD (Autism Spectrum Disorders); and creating live theatre play using multiple robots as actors for underserved K-12 students. This talk is expected to facilitate discussions on how various arts can expand representation of the computing process and structure as well as how computing can expand our perceptual experiences.

Short Bio

Dr. Jeon is an assistant professor in the Department of Cognitive and Learning Sciences and the Department of Computer Science at Michigan Tech and director of the Mind Music Machine Lab. He also serves as a founding director of the Center for Human-Centered Computing at the Institute of Computing and Cybersystems (ICC) at Tech. His research areas include HCI (Human-Computer Interaction) and HRI (Human-Robot Interaction), with a focus on Auditory Displays, Affective Computing, Assistive Technologies, Automotive User Interfaces, and Aesthetic Computing. His research has yielded more than 130 publications across top peer reviewed journals and conference proceedings. His research is currently supported by NIH (National Institutes of Health), US DOT (Department of Transportation), MTTI (Michigan Tech Transportation Institute) and industry collaborators. He serves as an Associate Editor of MIT Press Journal, Presence: Teleoperators and Virtual Environments.