Are You Autonomous? Towards Designing Natural Interactions Between People and Drones

The increasing use of small-size drones is both exciting and frightening. The success and acceptability of these automated vehicles will depend on how well they will be able to communicate with users and passersby. How will people be able to make sense of a drone’s intentions and abilities? How will drones respond to people in complex situations? In this talk, I will discuss how we can leverage techniques at the intersection between technology and design to build novel interaction techniques for collocated human-drone interaction. I will discuss several methodologies that we have used successfully to understand user’s expectations. Using these results, I will present a few technical solutions that we have implemented and evaluated in real-world scenarios such as when building a drone tour guide for the Stanford campus.

Biography

Dr. Jessica Cauchard is a lecturer in the department of Industrial Engineering and Management at Ben Gurion University. Her research is rooted in the fields of Human-Computer and Human-Robot Interaction with a focus on novel interaction techniques and ubiquitous computing. Previously, she was faculty of Computer Science at the Interdisciplinary Center Herzliya between 2017 and 2019. Before moving to Israel, Dr. Cauchard worked as a postdoctoral scholar at Stanford University. She has a strong interest in autonomous vehicles and intelligent devices and how they change our device ecology. She completed her PhD at the University of Bristol, UK in Computer Science and received a Magic Grant for her work on interacting with drones by the Brown Institute for Media Innovation in 2015.