How Sweet It Is...
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Monday, September 14th, 2020 - ONLINE ONLY
https://cornell.zoom.us/j/97636298817?pwd=a2ZLQlBqbHJ5dXJ1QjZpeEl3cjRpdz09
Meeting ID: 976 3629 8817; password: cida
12:00 – 12:45 pm – Presentation with Live Stream
12:45 – 1:00 pm - Q&A

Abstract:

This talk will present the sensor-level challenges of detecting crop quality in the field. Unlike yield, which can often be quantified visually, the quality of a crop in terms of its harvest-readiness, ripeness, or sweetness, is difficult to “see.” Rather, most quality evaluation is done in the laboratory after the crop has been harvested. The goal of high-throughput in-field testing will be presented and the challenges facing two particularly challenging crop families discussed, those of underground crops as well as above ground crops having a thick-impenetrable skin. Proposed methods for in-field sensing of these crops’ quality will be presented while also discussing the challenges facing the field implementation of each.

Bio:

Amal El-Ghazaly is an assistant professor in ECE. She received her Ph.D. in Electrical Engineering from Stanford University, then completed a postdoc at the University of California Berkeley. Prior to that, she earned both her B.S. and M.S. degrees from Carnegie Mellon University. Her research broadly focuses on designing new magnetic, electric, and optical devices for versatile systems, in other words, devices that can adapt in real-time to meet the many complex needs facing technology both now and in the future.

Background on the Cornell Institute for Digital Agriculture:
An interdisciplinary group of Cornell University faculty began meeting in early 2017 to formulate an Initiative for Digital Agriculture, believing that Cornell is uniquely equipped to lead in this emerging arena that will benefit the public for generations. We define DA to mean the application of computational and information technologies coupled with nanotechnology, biology, systems engineering and economics to both the research and operational sides of agriculture and food production. With approximately 100 faculty from 5 Cornell colleges participating, we are collaborating with external stakeholders to shape and implement a research agenda for DA that will build a pipeline of discovery and innovations for the next 10+ years. Please contact Gabriela Cestero at gc423@cornell.edu with any questions.