The Field Robotics Center

Seminar Series

Tues, Sept 10 NSH 1109 1-2 PM

Food and Drinks will be served

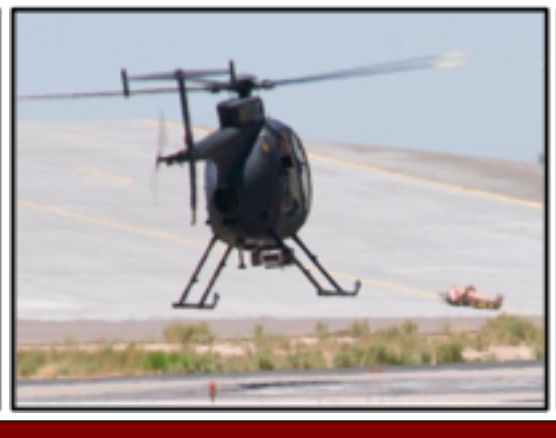
Weilin Wang
College of Engineering
University of Georgia

Advanced Sensing and Imaging Techniques for Automated Quality Inspection of Fruits and Vegetables

Abstract: Automated and non-destructive inspection is the key issue in the safety and quality control of fruits and vegetables. The talk introduces a series of work conducted to improve the efficacy of the quality inspection of onions. The optical properties of onion tissues were investigated to develop sensing systems using spectroscopic and imaging methods. A novel multi-sensor-based machine vision system was designed to integrate hyperspectral imaging, RGB-D imaging, and X-ray imaging techniques to evaluate both external and internal quality traits of onions nondestructively. This work lays the groundwork of next generation automated and robotic systems for the quality inspection and grading of fruits and vegetables.

Speaker Bio: Weilin Wang is a doctoral candidate of the College of Engineering at the University of Georgia. He received his B.S. degree in Electrical Engineering from China Agricultural University in 2002 and his M.S. degree in Biological Engineering from the University of Georgia in 2010. His current doctoral research is focused on development and applications of advanced sensing and imaging technologies to improve postharvest quality inspection of fruits and vegetables. Weilin Wang is first author of 5 peer-reviewed journal articles and 7 conference papers. He currently serves as the secretary of Machine Vision Committee of the American Society of Agricultural and Biological Engineers.






For further information please contact: Uland Wong, uyw@andrew.cmu.edu. ***www.frc.ri.cmu.edu***