## **Overcoming current limitations of fruit-harvesting robots**

Stavros G. Vougioukas Professor, Dept. of Biological and Agricultural Engineering University of California, Davis

Harvesting fresh fruit is labor-intensive, and growers face challenges from rising farm labor costs and shortages. Harvesting robots represent a promising technology that could significantly reduce the labor required for harvesting. Despite many years of research and development by academic groups and start-up companies, cost-effective robots demonstrating high fruit-picking efficiency and throughput are still unavailable. This talk will present the main factors contributing to harvesting underperformance, discuss ongoing work on multi-armed robots to drastically increase picking speed, and suggest approaches to enhance efficiency through improved perception.



Stavros G. Vougioukas is a professor of biological and agricultural engineering at the University of California, Davis, where he serves as vice chair and undergraduate faculty advisor in the Department of Biological and Agricultural Engineering. He earned his Ph.D. in Electrical, Computer, and Systems Engineering from Rensselaer Polytechnic Institute in Troy, NY, specializing in Robotics and Automation under a Fulbright fellowship. Before joining UC Davis, he was a faculty member in the Department of Agricultural Engineering at Aristotle University, Greece. His work focuses on robotic harvesting, labor-saving technologies, and precision yield mapping, with funding from USDA-NIFA, grower commodity boards, and industry.

FRIDAY May 16 10-11AM Rogers Hall 230 FREE Refreshments Served OSU Robotics robotics.oregonstate.edu

