Changying "Charlie" Li, professor, University of Florida, is being honored for outstanding contributions in developing innovative sensing and automation technologies to advance plant phenomics, specialty crop harvest, and postharvest technologies.

Li is currently a professor in the Department of Agricultural and Biological Engineering at the University of Florida. He also holds an administrative appointment to lead the artificial intelligence working group within the Institute of Food and Agricultural Sciences, overseeing the collaborative efforts of over 40 faculty members.

Li's research program focuses on advancing digital agriculture through innovations in sensing, robotics, and machine learning to address critical challenges such as labor shortages and the growing need for increased agricultural productivity and resilience. His contributions have significantly advanced specialty crop harvesting, postharvest handling, and high-throughput phenotyping for accelerated crop breeding. Notably, he led a specialty crop research initiative multidisciplinary team that developed an affordable and efficient mechanical harvest-aid system for fresh-market blueberries, reducing labor costs and minimizing fruit damage. He is a co-inventor of the berry impact recording device, which simulates berry fruit to measure mechanical impacts during harvesting and packing, leading to improved equipment design and reduced fruit bruising. His group developed the modular agricultural robotic system, an autonomous, multi-purpose, and cost-effective platform for in-field automated phenotyping and precision farming. He has pioneered image-based machine learning methods for yield prediction, high-resolution single-plant phenotyping, and crop stress detection in major crops such as cotton, blueberries, and peanuts. Li also played a leadership role in creating the Phenomics and Plant Robotics Center at the University of Georgia. He teaches both undergraduate and graduate courses on instrumentation, field robotics, computer vision, and machine learning.

A 25-year member of ASABE, Li has demonstrated a strong commitment to the organization and its mission. He has served as a leader and member in multiple committees within the Information Technology Sensors and Controls and Machinery Systems Technical Communities. Currently, he serves on the ASABE Foundation Board of Trustees, the Membership Development Council, and the editorial board of ASABE referred journals. He has been recognized with several ASABE major awards and numerous paper awards throughout his membership.

Li's notable accomplishments include 133 peer-reviewed journal publications and $17.8 M total research funding with $8 M in externally funded grants as PI. He served as advisor for 25 graduate students, including 14 PhD and 11 MS students. His graduate students have received 45 awards from local to national organizations.