



## Qin Zhang

**Qin Zhang, ASABE Fellow**, is recipient of the 2017 John Deere Gold Medal for contributions in applying science to the soil with automation technology for plant production.

Zhang is a professor in the biological systems engineering department and is director of the Center for Precision and Automated Agricultural Systems, both at Washington State University (WSU) in Prosser, Washington. Zhang's major research interests include intelligent agricultural machinery, agricultural robotics, precision, and automation technologies for plant production. He leads a research team creating agricultural automation solutions for plant production at WSU.

Zhang is an internationally recognized scholar in agricultural automation technology, specifically for his work developing and verifying the idea of on-board information management and control systems for agricultural machinery. He also initiated and coordinated a transdisciplinary study on field robotics for specialty crop production in the Pacific Northwest with validated systems ready for commercialization. Some of these adopted or commercialized research outcomes, including tractor auto-steering and targeted sprayer technologies have resulted in large social and economic impacts. While his research is often pioneering, a remarkable facet of Zhang's career is his constant efforts to make his research widely available: and already his RFID-based orchard labor management technologies and mechanical hand-held apple thinning device is already being tested in the field.

A 29 year member of ASABE, Zhang served on the ASABE Central Illinois section as both a leader and member. He was a member on the Kishida International award committee and is a longstanding member on the Machinery Systems Agricultural Equipment Automation committee. Zhang was an associate editor for *Transactions of the ASABE* and *Applied Engineering in Agriculture* for several years. Zhang currently serves as the chair of the International Commission of Agricultural and Biosystems Engineering, Equipment Engineering for Plant Production. He is also a member of the International Federation of Automatic Controls, serves as a board member for the Technical Committee of Control in Agriculture, is a member of the International Society of Precision Agriculture and the International Society of Horticultural Science.

Zhang is author or coauthor of more than 350 peer-reviewed articles, posters, or conference proceeding papers. He has also authored two textbooks, eight book chapters, and edited three technical books. Zhang is the inventor or coinventor on 11 US patents. Zhang has received numerous awards throughout his career including more than ten paper awards from various organizations including an ASABE Superior Paper award. Zhang received the Faculty award for Excellence in Research from the College of Agricultural, Consumer, and Environmental Sciences and the Collins award for Innovative Teaching from the College of Engineering, both from the University of Illinois at Urbana-Champaign.