



N A P A

Association of Nepalese Agricultural Professionals of Americas
Proudly Announces the 9th Talk Session (Webinar) On
**Agricultural Automation & Robotics:
Challenges & Opportunities in Small-Scale Farming**

BY: **Manoj Karkee, PhD**

Associate Professor
Department of Biological Systems Engineering
Center for Precision and Automated Agricultural Systems
Washington State University, USA

When: Sept 30 (Sunday), 2018

Time: 9 PM US Eastern Standard Time

How to Join the Session?

Join from PC, Mac, Linux, iOS or Android: <https://zoom.us/j/176995717>

Or **iPhone** one-tap (US Toll): +1 669 900 6833 or +1646 876 9923

Or **Telephone**: Dial: +1 669 900 6833 or +1 646 876 9923, **Meeting ID: 176 995 717**

Respected NAPA
members & beyond

Greetings!

I cordially invite you to attend the upcoming NAPA's 9th talk session. Please do not miss the opportunity to interact in a live discussion forum on '**AGRICULTURAL AUTOMATION AND ROBOTICS**.' Join us to add value on our collective strength & resource pool.

Together, we can make
a difference.

Respectfully,

Lila K. Khatiwada, PhD
Chair,
Talk Session (Webinar)
Committee

Talk Summary



As the world population is expected to reach ~10 billion in the next 50 years, demand for food, fiber and fuel will increase immensely. The world, therefore, is facing with this critical challenge to sustainably increasing agricultural production. Recognizing this challenge, Dr. Karkee has been focusing on developing mechanization and automation solutions for farming that would reduce the use of labor, water, fertilizer and other inputs while increasing the yield and quality of products. In this seminar, Dr. Karkee will discuss the importance of precision and automated/robotic systems for the future of farming. He will then

summarize past efforts and status of agricultural automation and robotics, particularly for fruit crop production, followed by an introduction of the novel systems being developed in his program. He also plans to discuss future directions in research and development and potential efforts in technology and knowledge transfer to small-scale farming operations in countries like Nepal.

Speaker's Bio: Dr. Manoj Karkee is an Associate Professor at Washington State University (WSU). He was born and raised in Bhojpur, Nepal. He received diploma in Civil Engineering and undergraduate in Computer Engineering from Tribhuvan University, Nepal. His MS degree was in remote sensing and GIS from AIT, Thailand and his PhD in Agricultural Engineering and Human Computer Interaction from Iowa State University. Dr. Karkee leads a research program in the area of sensing, machine vision, and agricultural robotics at the WSU. He has published widely in many journals such as 'Journal of Field Robotics', 'Computers and Electronics in Agriculture', and 'Transactions of the ASABE', and has been an invited speaker at numerous national and international forums. Dr. Karkee is currently serving as an elected chair for International Federation of Automatic Control (IFAC) Technical Committee 8.1, Control in Agriculture, as an associate editor for 'Transactions of the ASABE', as a guest editor for 'Robotics', and as an elected executive member of Association of Nepalese Agricultural Professionals of Americas (NAPA).