



Santosh K. Pitla

Santosh K. Pitla is the 2021 A.W. Farrall Young Educator for excellence in teaching, mentoring and leadership of undergraduate and graduate students in the field of machine automation.

Pitla is an associate professor of advanced machinery systems in the biological systems engineering department at the University of Nebraska-Lincoln. He teaches courses related to sensors and controls in agri-industries, electricity, hydraulic power and embedded control systems to mechanization management and agricultural engineering students. He also conducts research in the areas of agricultural robotics, control architectures for safe operation of autonomous equipment, machine data acquisition/analytics, software application development and techno-economics of advanced machinery systems. He currently leads the Advanced Machinery Systems Laboratory (AMSL) in the biological systems engineering department. The AMSL lab houses three tiered robotic platforms for developing individual and multi-robot controlled architectures.

Pitla also has a successful teaching career and has developed and taught five courses for both undergraduate and graduate students in the mechanized systems management and agricultural engineering curricula. At UNL, he has established new industry partnerships providing more hands-on learning experiences for students. He serves as the faculty advisor to the UNL Robotics Club and as the senior faculty advisor to the Mechanized Systems Management Club

Pitla is a coauthor of 26 peer-reviewed journal articles and four book chapters. He has also hosted a number of webinars that were well attended, recently “Ground and Aerial Robots for Agricultural Production: Opportunities and Challenges” was attended by more than 400 participants. Pitla has one US patent with a second patent application in process. Pitla has received a number of awards for his work as an educator and researcher. He received the 2016 ASABE Sunkist Young Designer award, the 2020 NACTA John Deere Award, and the 2018 Holling Family Teaching Excellence award.

A 17 year member of ASABE, Pitla has made significant contributions through his work on a number of committees. He is currently chair of the Information Technology, Sensors, and Control Systems Mechantronics and Robotics committee and is the secretary of the Educational Outreach and Professional Development Agricultural Technology and Management Curriculum Review and Program Recognition committee. Pitla also maintains memberships with the Institute of Electrical and Electronics Engineers Robotics and Automation Society, the American Society of Engineering Education, and North American Colleges and Teachers of Agriculture.