FACULTY RESEARCH PRESENTATION: NEW RESEARCH CENTERS SUPPORT IOWA FAMILIES AND INDUSTRIES

The April faculty presentation will feature the leaders of two new National Science Foundation- and USDA-supported research centers approved at the Regents’ February meeting.

Hongwei Zhang
Professor, Electrical and Computer Engineering

Professor Zhang leads the Center for Wireless, Communities and Innovation, as well as the $16 million National Science Foundation and USDA-National Institute of Food and Agriculture program ARA which focuses on innovation of rural broadband technologies and services. The center is creating a rural “wireless living laboratory” where scientists conduct research on wireless applications in precision agriculture, rural education, advanced manufacturing, renewable energy, and other industries critical to Iowa’s economy. The center works with Iowa communities to help them make the most of their broadband technologies, while also developing pipelines of students and researchers in wireless applications.

Zhang holds bachelor’s and master’s degrees in computer engineering from Chongqing University in China, and a Ph.D. in computer science and engineering from The Ohio State University. He joined Iowa State in 2017.

Baskar Ganapathysubramanian
Joseph C. and Elizabeth A. Anderlik Professor in Engineering, Mechanical Engineering

Professor Ganapathysubramanian leads the $20 million National Institute of Food and Agriculture program AI Institute for Resilient Agriculture, or AIIRA. AIIRA is anchored in the Translational Artificial Intelligence Research and Education Center, or TrAC, which broadly focuses on the convergence of artificial intelligence (AI) and machine learning. AI is poised to fundamentally transform large swaths of Iowa’s economy, including agriculture, manufacturing, healthcare and transportation. The center applies AI to address scientific and societal challenges, while also focusing on collaboration and knowledge transfer, workforce development and training, and industry engagement. TrAC is supported by $27 million in funding from the National Science Foundation and the USDA’s National Institute of Food and Agriculture.

Ganapathysubramanian holds a bachelor’s degree in mechanical engineering from the Indian Institutes of Technology-Madras, and master’s and Ph.D. degrees in mechanical and aerospace engineering from Cornell University. He joined Iowa State in 2008.