Celebrating young faculty

San Antonio newspaper award honors three UTSA engineering professors

Three faculty members in UTSA's College of Engineering have been selected for recognition among the San Antonio Business Journal's 40 Under 40. Pranav Bhounsule, assistant professor of mechanical engineering, Heather Shipley, Burzik Professor in Engineering Design and chair of the Department of Civil and Environmental Engineering, and Krystel Castillo, GreenStar Endowed Assistant Professor in Energy, were honored earlier this spring for their contributions to their field and their community.

"It's wonderful to see the San Antonio community honor and support the hard work and dedication that these faculty show each day as part of the College of Engineering," said JoAnn Browning, dean of the UTSA College of Engineering. "Their work is a shining example of UTSA's continued progress toward Tier One status."

Bhounsule's Robotics and Motion Lab at UTSA focuses on the design and control of legged robots. His research led to a world record, when the bipedal robot he created walked 40 miles without stopping or recharging. He teaches robotics and controls at UTSA and brings his research to the community by organizing robotics related outreach events.

"It feels great to be recognized for one's work and for contributions made to one's profession and community," said Bhounsule. "The award by the SA Business Journal to three UTSA engineering faculty this year is an indicator of top-tier research and education commitment of the college towards the South Texas region."

As a researcher, Shipley has pioneered a process that removes toxic, cancer-causing elements from drinking water sources. As the chair of her department, she is an effective leader in reaching goals for research, teaching, and service to the UTSA community. She also created an international study abroad program for civil engineering undergraduate students as well as the UTSA Scholarship Program for Undergraduate Retention and Success (SPURS), which is sponsored by the National Science Foundation and provides mentoring and assistance to financially disadvantaged students.

"I felt very honored when I heard I had been selected for this award," said Shipley. "The other award winners are quite accomplished, and it was an honor to be included among them."

Through funding from the Department of Agriculture, Castillo serves as project director of the BioEnergy and Water for Agriculture Research and Education Network, a multi-institutional grant that aims to enhance interdisciplinary research and build a highly trained diverse workforce with strong analytical and computational skills. She is also the leader of two more projects (WE ARE and U-GREAT), which aim to accomplish comprehensive STEM reform through innovative education, research, and partnership initiatives. Her research is focused on constructing holistic mathematical models and solution procedures to design and optimize clean energy systems. Castillo's research has been supported with more than $4M (about $2.4 M as principal investigator) by USDA/NIFA, the Department of Energy, Environmental Protection Agency, and the Air Force Research Lab, among others.

LEFT: Krystel Castillo, GreenStar Endowed Assistant Professor in Energy and director of The Texas Sustainable Energy Research Institute. BELOW: Pranav Bhounsule, assistant professor of mechanical engineering. RIGHT: Heather Shipley, Burzik Professor in Engineering Design and chair of the Department of Civil and Environmental Engineering.