



Biomedical engineering students inducted into Phi Kappa Phi

Kennedi Wilson and Jasmine King, biomedical engineering undergraduate students, were inducted into Phi Kappa Phi in the spring semester. Phi Kappa Phi is the nation's oldest and most selective collegiate honor society for all academic disciplines. Only the top 10 percent of seniors and 7.5 percent of juniors, having at least 72 semester hours, are eligible for membership. The honor society recognizes and promotes academic excellence in all fields of higher education and engages the community of scholars in service to others.

Recreating antique toys with modern technology

The Rowdy Walker may look like a simple device, but developing it was anything but. UTSA graduate student Christian Trevino started on the project, which is based on a toy from the 1900s, in 2015 and has been perfecting the 3D printed design over the last 12 months.

"Traditionally, this kind of toy is made up of three wooden pieces - a body with a fixed leg, a moving leg, and a hinge joint that attaches the two," said Trevino, who recently started her graduate studies in mechanical engineering at UTSA. "We have re-engineered the toy so that it can be 3D printed as a single, integrated assembly that includes the pin joint."

Trevino explained that after the toy is printed, she had to manually remove the extra material that held the leg in place so the toy could "walk" down an incline.

"Just like a wind-up toy uses potential energy stored in a spring, the walking toy uses potential energy as it descends downhill," said Pranav Bhounsule, the mechanical engineering faculty member who mentored Trevino. "However, unlike a wind-up toy that has an intricate mechanism, our Walking Rowdy relies on its mass distribution, inertia, and leg geometry to amble downhill."



Trevino said that the project wouldn't have been possible without 3D printing because that allowed her to tune the geometry and mass distribution without having to compromise the likeness of the logo. Eventually, she hopes to mass produce the toy and sell it as a souvenir.

Race to excellence

Student teams from UTSA's Department of Electrical and Computer Engineering swept the Central Region of the North America Finals of NXP Intelligent Car Race. The event, which took place in April at Texas State University, pitted students from all across the Central Region against each other, as they competed for a place at nationals, which will be held in Austin this summer.

in computer and electrical engineering, plans to continue volunteering after college.

"Volunteering motivates me to do better in my studies," he said. "When I'm not studying, I'm volunteering. I make it my duty to show everyone in my neighborhood that there's a way out if you work hard."

Brown counts among his talents the ability to see even the smallest opportunities. He noted that his football talents in high school brought him a UTSA scholarship, which has now led to him tapping into his potential as an engineer.

"UTSA taught me to be proactive," he said. "I learned how to grow up here. It's prepared me so well that I have no fears about starting my career. I'm happy to have found a stable, solid life."

