

# Innovations

The background of the cover features a close-up of a person's face, which is heavily blurred. In the foreground, a hand wearing a white nitrile glove holds a rectangular metal plate with a fine grid of small holes. The lighting is dramatic, highlighting the texture of the glove and the metallic surface of the plate.

THE UNIVERSITY OF TEXAS AT SAN ANTONIO, COLLEGE OF ENGINEERING

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**ENGINEERING:**  
**The new vanguard**  
**in the war against**  
**nosocomial**  
**infections?**

**UTSA** Engineering

# New FACULTY

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## Daniel Pack

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Department Chair and Professor  
in Electrical and Computer Engineering

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Ph.D. — Purdue University

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Originally from Phoenix, Ariz., Pack comes to UTSA for the chance to be a part of a transforming university. He received his master's degree from Harvard and then moved on to earn his doctorate in electrical engineering at Purdue University. His expertise ranges from multiple cooperative systems and signals systems to embedded systems and intelligent control. Pack has earned the Carnegie Foundation Colorado Professor of the Year Award, Outstanding Academy Educator Award, Tau-Beta-Pi Engineering Honour Society Professor, and Magoon Teaching Award. He loves a variety of sports, music and sitting down to read a good book.

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## Arturo Montoya

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Assistant Professor in Civil Engineering

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Ph.D. — Columbia University

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Montoya, a native of Tegucigalpa, Honduras, joins the civil engineering department after earning his master's and doctorate degrees from Columbia University. He came to UTSA because of its ideal environment to launch his research program and perform collaborative research with other departments within UTSA and other institutes in the area. Montoya's expertise is in the safety and reliability of suspension bridges, friction and fracture of corroded high strength steel wires, aging infrastructure, and computational approaches for large scale finite element models. Within the College of Engineering, he sees a great opportunity to motivate students of Hispanic heritage to pursue a graduate education and careers in research. When he isn't teaching or working in his lab, Montoya enjoys soccer, tennis and jogging.



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**Adel Alaeddini**

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Assistant Professor in Mechanical Engineering

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Ph.D. — Wayne State University and  
Iran University of Science and Technology

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A native of Tehran, Iran, Alaeddini came to UTSA because of its culture and motivation for progress and expansion. Here he hopes to expand his research in reliability and quality control, applied multivariate analysis, statistical learning and data mining, modeling and simulation, design of experiments, and response surface methodology and process optimization. Alaeddini also has interests in the biomedical industry surrounding biomedical informatics and healthcare operations management. In his spare time he enjoys painting, calligraphy, soccer, and gymnastics.



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**Krystel Castillo-Villar**

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Assistant Professor in Mechanical Engineering

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Ph.D. — Texas Tech University and  
Monterey Tech

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Attracted to the College of Engineering at UTSA because of its commitment to providing a world-class education as well as research opportunities to a diverse community, Castillo-Villar eagerly hopes to be part of the development of young engineers and impact their lives in a positive way as her teachers and mentors have influenced her. Originally from Mexico, she now hopes to serve the city of San Antonio and its fast-growing industry. Castillo-Villar's areas of expertise reside in advanced quality control, total quality management, and principles of optimization. However, she is also interested in process optimization and logistics as they are applied to energy and healthcare. In her spare time she enjoys quality coffee while reading a book and listening to music.