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SDSU Aerospace Engineering

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Message from the department chair, Dr. Ping Lu:

Dear AE alumni and friends: After almost 1 ½ year since last March, we are now all back on campus for the Fall 2021 semester! For our freshmen class 2020, this is their first semester to be physically on SDSU campus. With this issue of newsletter we would like to share with you some exciting developments related to the Department in during the past year. I hope you enjoy reading.

Mars 2020 Perseverance



NASA successfully landed the Mars Rover on 02/18/21. Our department chair, Dr. Ping Lu, published his op-ed in the San Diego Union Tribune. You can read the article on this historic landing here:

<https://www.sandiegouniontribune.com/opinion/commentary/story/2021-02-26/mars-perseverance-sdsu-aerospace-engineering>

NASA Virtual Technology Day



Dr. Ping Lu's Ph.D. student, **Sergio Sandoval**, was selected by NASA as one of the two showcases for the NASA Virtual Technology Day on the Hill which was held January 2021.

https://www.nasa.gov/directorates/spacetech/nasa_technology_day_on_the_hill Sergio created a video to explain planetary landing abort capability and guidance for spacecraft. Here is the link: <https://youtu.be/81xig5zReyg>

2021 AIAA Region VI Student Conference Winners!



Bradley Zenlenka, a graduate student and **Aldair Herrejon-Andrade**, an undergraduate student, received the 2nd prize in the 2021 Region VI Student Conference Masters Category for their paper and presentation titled "*San Diego State University Low Speed Wind Tunnel Force Balance Calibration.*"

Virtual DBF competition

Our student organization at SDSU, DBF (Design, Build, Fly), scored 37th out of 93 teams in an international virtual competition. However, later the DBF



organizers announced a modified mission for each team to submit video of if they could build an aircraft. SDSU DBF members only had one week to build an aircraft with limited capacity for the safety of the students. They were able to build, fly and submit a video to the judges, which placed them 21st overall. This is truly a historic achievement and made them the top scoring DBF team in California! Their adviser is **Dr. Xiaofeng Liu** and he wanted to thank the volunteer coaches, pilots and supporters of the SDSU DBF team for their help and support. <https://sdsu-dbf.org/>

Your generous giving can make a tremendous difference for our students today who will become the future aerospace engineers of tomorrow. Please consider making a gift to support the Department of Aerospace Engineering and student success <http://campaign.sdsu.edu/Aerospace> To learn more about giving to the Department, please contact our Senior Director of Development, **Kate Carinder**, at kcarinder@sdsu.edu | 619-594-8264



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TEXAS A&M UNIVERSITY
Engineering

Dr. John E. Hurtado

INTERIM VICE CHANCELLOR OF ENGINEERING
The Texas A&M University System

INTERIM DEAN OF ENGINEERING
Texas A&M University



Alumni Spotlight

Dr. John Hurtado, an alumnus of SDSU, was named Interim Vice Chancellor and Dean of Engineering and Interim Agency Director of Texas A&M Engineering Experiment Station (TEES). Dr. Hurtado received his BSAE from SDSU in 1988, followed by MS (1991) and Ph.D. (1995) in aerospace engineering from Texas A&M University. Before his new appointment, Hurtado was the deputy director and chief technology officer of the Bush Combat

Development Complex, and professor of aerospace engineering at Texas A&M University. His research areas include aerospace systems and robotics, among others, and his work is being used at NASA and Sandia National Laboratories. His patented algorithms were developed for unique miniature robots that the Smithsonian Institution recently obtained for its permanent collection at the National Museum of American History. Hurtado joined the Department of Aerospace Engineering at Texas A&M in 2001. He is also a member of the SDSU aerospace engineering industrial council.



In Memoriam

It is with great sadness that we share the news that SDSU AE lecturer Raymond Moberly, unexpectedly passed away at his home on July 6, 2021. He is survived by his wife Amy and teenage son Walker. Raymond earned his PhD in Computational Science in 2014. He has been an instructor at SDSU teaching mathematics to engineering and science students. He was also a CEO of a small business company Faster Logic LLC that focused on digital hardware design and embedded software systems. He was loved for his sense of humor and concern and care for student learning. We will miss him. May his soul rest in peace. Dr. Raymond Moberly's Obituary, visitation and funeral information can be found at <https://memorials.eastcountymortuary.com/raymond-moberly/4668485/>

Notable Grants



Profs. **Gustaaf Jacobs** and **Pavel Popov**, with partner Solar Turbines, Inc., won a sizable grant from the Department of Energy on Cutting-Edge Research for Efficient Hydrogen Gas Turbines. <https://www.energy.gov/articles/doe-awards-62-million-cutting-edge-research-efficient-hydrogen-gas-turbines> Dr. Popov, an Assistant Professor who has joined SDSU less than 2 years ago, is already establishing himself as a force in competing on the national stage for such a highly competitive program. Dr. Jacobs has further solidified himself as a successful leader in cutting-edge research and extramural funding, and now as an outstanding mentor to junior faculty in their scholarly pursuits. Congratulations!

Notable Grants

- **Dr. Xiaofeng Liu** has received a grant from the U.S. Department of Defense in the amount of \$599,702 to "Equip and Establish the Laboratory of Experimental Fluid Dynamics at SDSU with Full Range Measurement and Analysis Capabilities in Particle Image Velocimetry"
- **Dr. Margherita Capriotti** has been awarded a CSUPERB New Investigator Grant in the amount of \$15,000 for her project titled: "Engineering Guided Waves in Shear Wave Elastography for enhanced soft tissue diagnostics" You can find the newsletter announcement here: https://www2.calstate.edu/impact-of-the-csu/research/csuperb/Documents/2021SeedGrantAwardsWebAnnouncement043021.pdf?utm_campaign=CSUPERB%20Newsletter&utm_medium=email&utm_source=Revue%20newsletter

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