

Maj Dean Mirmirani, Ph.D.

Dr. Maj Mirmirani received his Ph.D. and M.S. in Mechanical Engineering from the University of California, Berkeley, and his B.S. in Mechanical Engineering from Tehran Polytechnic (Amir Kabir University). Prior to starting his career in the United States in 1981, he spent a year at the Imperial College of Science and Technology's Department of Electrical Engineering in London as an academic visitor working on the development of a 64-lead electrocardiography (EKG). In 1981, he joined the California State University, Los Angeles's (CSULA) Department of Mechanical Engineering, where he served as department chair for 12 years. At CSULA, he founded and directed the Air Force Office of Scientific Research (AFOSR)-funded Multidisciplinary Flight Dynamics and Control Lab and was also one of the two co-directors of the NASA-funded University Research Center (SPACE Center). During his tenure at CSULA, he led several major research projects totaling to over \$20M in funding. Most notable among them were the pioneering work on modeling, simulation, and control of airbreathing hypersonic flight vehicles; design and development of a high-endurance hydrogen fuel cell-powered UAV (the first such university-built vehicle to fly <https://www.youtube.com/watch?v=C1VyUmdg4iA>); design and fabrication of a full-scale precision segmented reflector testbed with shape control and pointing accuracy requirement comparable to a space-based system (a precursor to the J.W. Web); as well as development of a control-oriented multidisciplinary software package for aerospace systems design a project funded by AFOSR. While at CSULA, he also spent two summers at the National Institute of Health's Division of Mathematical Biology working on mathematical modeling for optimal delivery of monoclonal antibodies in treatment of cancer.

In 2007 Dr. Maj Mirmirani joined Embry-Riddle Aeronautical University as the dean of the College of Engineering at the Daytona Beach Campus. During his fifteen-year tenure, for two years (2016-2018) he also served as the interim senior vice president for academic affairs and research. In August 2021, he retired from ERAU and was given the title of Dean Emeritus. However, he was recruited to serve as the interim dean at the Russ College of Engineering and Technology at Ohio University June 2022 – July 2023.



During his service at ERAU, the college of engineering underwent an unprecedented growth in enrollment, the number faculty members and rise in academic reputation propelling it into the national stage. Eight master's and three doctoral programs (Ph.D. in aerospace engineering, Ph.D. in mechanical engineering, and Ph.D. in electrical engineering and computer science) were established. The Aerospace Engineering department -- the largest in the world -- now consistently ranks among the top five programs in the nation by the US News and World Report.

At Embry-Riddle he supported the founding of the Eagle Flight Research Center and his office funded and he personally participated in several pioneering projects including ERAU's entry into the NASA Green Flight Challenge in 2011 (ERAU being the only university to enter the competition). The ERAU entry was a hybrid electric airplane -- the first flight vehicle of this type -- which later led to the design and fabrication of the first high-energy density hybrid electric power plant for aviation application -- a \$3M project funded by Boeing. He also initiated and raised fund to develop a space camera (EagleCam), designed to go onboard the Intuitive Machine's spacecraft, which is scheduled to land on the Moon in 2024. The camera will separate from the spaceship just before landing to provide the first ever third-view footage of a spacecraft landing on a terrestrial body. Due to his visionary leadership and his determination to provide students with the cutting-edge tools and facilities, he managed the development of the John Mica Engineering and Aerospace Innovation Complex (MicaPlex), a 75,000 square foot facility comprised

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of state-of-the-art engineering labs side-by-side several startups and incubator space to spur innovation and entrepreneurship. Alongside MicaPlex, he advocated and secured funding to develop a new facility to house a state-of-the-art wind tunnel using particle imaging velocimetry for flow measurement.

Dr. Mirmirani received the CSULA's 2003 University Outstanding Professor Award and the 1996 Meritorious and Professional Promise Award. While at ERAU, he received the ABET President's Award for Diversity in 2007, and the 2011 Diversity and Women's Vision award. He has served on the ASEE's Public Policy Committee, on the advisory board of Orlando Regional First Robotics, the Embry-Riddle Research Park board, Memoria Inc. – a video conferencing startup -- advisory board. He has also served as an advisor to the Air Force Flight Viability board, the board of directors of NuTool and SoloPower – two Silicon Valley startups -- and the Global Engineering Deans Executive Council. He currently serves on the board of advisors of Sakuu, a Silicon Valley battery technology startup and is a senior advisor to UC San Diego Supercomputer Center's SPARK AI Consortium.

https://www.sdsc.edu/News%20Items/PR20231114_sparkai.html

Dr. Mirmirani is a Fellow of the ASME, a Fellow of the Royal Aeronautical Society, and an Associate Fellow of the AIAA. He is an instrument-rated private pilot and a member of the Airplane Owners and Pilots Association.