



Mechanical Engineering  
Academy of Distinguished Alumni

## **Jeanne Sullivan Falcon, Ph.D.**

*Honorary Mechanical Engineer, 2016*

BS, Physics, Carnegie Mellon University, 1988  
MSME, Massachusetts Institute of Technology,  
1990

Ph.D., ME, Massachusetts Institute of Technology,  
1994

*Chief Engineer, Controls and Simulation*  
National Instruments Corporation

Jeanne Sullivan Falcon was born in London, England, where her father worked as a civil engineer for the Navy and was assigned to the North Atlantic Treaty Organization (NATO). Her mother worked as a teacher and later as a business consultant. The family moved back to the United States when Jeannie was four and settled in Potomac, Maryland.

Jeannie enrolled at Carnegie Mellon in 1984 with a full Air Force Reserve Officer Training Corps (ROTC) scholarship. She studied physics and held internships in programming and numerical methods at the National Institute of Standards and Technology and at Sandia National Laboratories. She graduated in 1988 with honors and was selected as an ROTC Distinguished Graduate.

After college, she took an educational delay from the Air Force and began graduate studies in mechanical engineering at the Massachusetts Institute of Technology. Her master's thesis was funded by NASA and focused on trajectory design for launch vehicles using numerical optimization and simulation techniques. She conducted doctoral research at the Charles Stark Draper Laboratory in distributed transducer modeling and design for structural control. Jeannie's work involved the extension of mathematical distribution theory to two dimensions and was published in several journals. She completed her MIT Ph.D. in 1994.

Upon graduation, Jeannie began active duty military service at the Air Force Research Laboratory at Kirtland Air Force Base. As a captain, she led the system integration, performance, and flight testing of a vibration isolation and suppression system for precision pointing of satellite payloads. Her team won an SPIE Smart Structures Product Implementation Award for their work.

After completing active duty in 1998, she began work at Midé Technology Corporation in Massachusetts. Her projects included the design of a tactile actuator for the Navy and the development of advanced signal processing techniques for electrodiagnosis of the eye. She also consulted for Payload Systems, Inc. as a software and system engineer for a robotic cell growth experiment for the International Space Station.

She joined National Instruments (NI) in 2000 as the group manager for motion control in R&D and later worked as a hardware product strategist. She moved to the technical marketing group in 2003 to establish new business areas for the company in real-time math, control design, dynamic system simulation, and robotics. In 2011, she won the NI Product Marketing Engineer of the Year Award. Jeannie is currently a chief engineer at NI and leads multiple technical consulting, product strategy, and product management efforts on the core software team.

Jeannie also served as a lecturer at The University of Texas at Austin in the departments of mechanical and aerospace engineering. She taught courses in dynamic systems and controls as well as programming and engineering computation. From 2003 to 2014, Jeannie served on the External Advisory Committee (EAC) for the Department of Mechanical Engineering and supported the Department's 35-in-5 initiative (now known as Elevate ME) to increase the percentage of women in Mechanical Engineering. She is currently serving on the EAC for the UT Department of Aerospace Engineering and Engineering Mechanics.

Jeannie lives in Austin with her husband and daughter. They volunteer with several STEM efforts, including Introduce a Girl to Engineering Day at UT.