



AIAA/IIE LI Section TOUR

HOFSTRA UNIVERSITY MECHATRONICS LABORATORY

Guided by
Prof. Kevin Craig, Ph.D., Hofstra University

Wednesday, December 9, 2015

Hofstra University
Adams Hall Room 104
Hempstead, New York 11549

6:00 PM Sign-In
6:30-8:30 PM Presentation

Cost: Attendance is free of charge for all attendees.

Registration: Please register by contacting [David S Paris \[davidsparis@twc.com\]](mailto:David.S.Paris@twc.com) or Anthony Agnone (eggama@hofstra.edu)

Map/Directions:

https://www.hofstra.edu/pdf/about/infocenter/infocenter_print_campusmap.pdf

Program Description – The use of robotics is currently a trend in all areas of manufacturing. This program presents the technologies being used in the development of next generation robots. How a company like Festo has used the study of nature (biomimicry) to fuel them. State of the art robotic solutions used in manufacturing will be exposed through live demonstrations of several robotic solutions. The evening will end with a tour of Hofstra University's newly created Robotics and Advanced Manufacturing Laboratory.

About the Speaker

Kevin Craig graduated from the United States Military Academy at West Point, NY, with a B.S. degree and a commission as an officer in the U.S. Army. He received an M.S, M.Phil. and earned a Ph.D. degree from Columbia University. While in graduate school, he worked in the mechanical-nuclear design department of Ebasco Services, Inc., NYC. He taught and received tenure at both the U.S. Merchant Marine Academy and Hofstra University. Then at Hofstra, he worked as a research engineer at the U.S. Army Armament Research, Development, and Engineering Center (ARDEC) Automation and Robotics Laboratory. He received the 1987 ASEE New Engineering Educator Excellence Award. In 1989, he joined the faculty at Rensselaer Polytechnic Institute (RPI) as Director of Core Engineering, the first two years of the School of Engineering, and as Chair of the Engineering Science Interdisciplinary Department. He taught and performed research in the areas of mechatronic system design and the

modeling, analysis, and control of multidisciplinary engineering systems. He developed the Mechatronics Program at RPI, which included an extensive teaching and research laboratory and several undergraduate and graduate courses in mechatronics. He collaborated extensively with the Xerox Mechanical Engineering Sciences Laboratory (MESL), an offshoot of Xerox PARC. He is the author of over 30 refereed journal articles and over 50 refereed conference papers. Emphasis in all his teaching and research is on human-centered, model-based design, with a balance between theory and best industry practice. At RPI, he received the two highest awards conferred for teaching: the 2006 School of Engineering Education Excellence Award and the 2006 Trustees' Outstanding Teacher Award.

From 2007 to 2014, he wrote a monthly column on mechatronics in Design News magazine. Over the past 20 years, he has conducted hands-on, integrated, customized, mechatronics workshops for practicing engineers nationally and internationally, e.g., at Xerox, Procter & Gamble, Rockwell Automation, Johnson Controls, Brady Corp., Pitney Bowes, and Siemens Health Care in the U.S., and at Fiat and Tetra Pak in Italy. He is a Fellow of the ASME and a member of the IEEE and the ASEE.

In January 2008, he was appointed the Robert C. Greenheck Chair in Engineering Design, a \$5 million endowed chair, at Marquette University. His mission was to integrate multidisciplinary design and discovery learning throughout the entire college. He transformed students, faculty, curricula, and facilities throughout the college and created a new engineering education mindset and culture for innovation. He was given the 2013 ASEE North-Midwest Best Teacher Award and the 2014 ASME Outstanding Design Educator Award.

In the fall of 2014, he returned to the Hofstra University School of Engineering and Applied Science as a tenured full professor of mechanical engineering. He is the Director of the Robotics and Advanced Manufacturing Laboratory, which he created with \$1M funding from NYS / Hofstra, and also the Director of the Center for Innovation, a new center created to collaborate with business and industry to foster innovation.