

Dr. Andrzej Banaszuk Senior Director, Systems



Biographical Profile

Andrzej Banaszuk, Ph.D., is Senior Director, Systems at United Technologies Research Center (UTRC). In this role, he provides direct and matrix leadership to the technology activities across UTRC and with the Program Offices representing each UTC business unit. This includes directing technical staff, laboratories and partnerships for research in Controls, Embedded Systems, Decision Support & Machine Intelligence, Power Electronics, Systems Engineering, Modeling of System Dynamics and Optimization and Cyber-Physical Systems. Banaszuk is also charged with ensuring the health of the organization for all technology and engineering needs across UTRC, to include availability, quality and capability of personnel and processes for technology development, product

innovation, project management and project engineering staff across all organizations as well as directing UTRC's Advanced Laboratory on Embedded Systems (ALES) offices in Italy.

Since joining UTRC in 1997, Banaszuk has conducted research in analysis, design and control of dynamical systems applied to jet engines, rotorcraft, unmanned systems, electric power networks, and buildings. Since 2000, he has led collaborative research teams in the areas of flow control, control of combustion instabilities, robust design of large uncertain dynamic networks, and autonomy.

Banaszuk is a Fellow, Institute of Electrical and Electronics Engineers (IEEE). He received the 2007 IEEE Controls Systems Technology Award for achievements in active and passive control of flow instabilities in jet engines, and was appointed to serve on the Board of Governors of IEEE Control Systems Society in 2004. From 1999 to 2002, he was an Associate Editor of IEEE Transactions of Controls Systems Technology. He was elected to the Connecticut Academy of Science and Engineering in 2015. Banaszuk holds 9 patents and has authored 44 journal papers and 71 conference papers. He is a member of IEEE's Controls and Robotics Societies; Society for Industrial and Applied Mathematics' (SIAM) Controls and Dynamical Systems Societies; the Association for Unmanned Vehicle Systems International (AUVSI); and the American Helicopter Society (AHS).

Prior to his tenure at UTRC, he performed academic research in linear and nonlinear control theory, holding various research and teaching positions at the University of California at Davis, University of Colorado at Boulder, Georgia Institute of Technology, and Warsaw University of Technology. Banaszuk earned a Ph.D. in electrical engineering from Warsaw University of Technology and a Ph.D. in mathematics from the Georgia Institute of Technology.