



دائرة الهندسة الكهربائية وهندسة الحاسوب  
تتشرف بدعوتكم لحضور محاضرة عامة بعنوان:

## "Artificial Intelligence (AI) Applications in Aeronautics"

يقدمها

الدكتور بسام مُصفر

وذلك يوم الثلاثاء الموافق 12 تشرين الثاني 2019، في تمام الساعة 2:30 ظهراً  
قاعة Bamieh302 (مبنى بامية)

### Abstract:

NASA aeronautics has made decades of contributions to aviation. Every U.S. commercial aircraft and U.S. air traffic control tower has NASA-developed technology on board that helps improve efficiency and maintain safety. Research conducted by Aeronautics Research Mission Directorate (ARMD) directly benefits today's air transportation system, the aviation industry, and the passengers and businesses who rely on aviation every day. ARMD scientists, engineers, programmers, test pilots, facilities managers and strategic planners are focused on aviation's future. They design, develop and test advanced technologies that will make aviation much more environmentally friendly, maintain safety in more crowded skies, and ultimately transform the way we fly. This talk focuses on applying Artificial Intelligence and Machine Learning concepts to solving current problems that face Aeronautics team and aim to help improved current operation in the National Air Space (NAS).

### Biography:

Dr. Musaffar is currently the Director of Aeronautics Research Team at NASA Ames Research Center (ARC). He served as the Technical Lead for Aeronautics Research Team at NASA ARC since 1999. He was a Professor with University of California Santa Cruz in the Electrical Engineering Department from 2003 to 2013 and served as an Adjunct Professor at Santa Clara University Electrical Engineering and Computer Science Department from 1995-1996. He received B.S, M.S and PhD Degrees in Electrical Engineering from University of Missouri-Columbia in 1982, 1984 and 1989 respectively.

Bassam has authored over 30 articles in peer reviewed journals and conferences. He is the recipient of several awards from NASA including: best technical paper award at NASA Ames in 1993, Group

Achievement Awards in 1992, 2000, 2001,2004, and 2008. NASA manager of the year award in 2010. Bassam also recently received the Manager of the Year Award in 2018.

From 1993 and 1999, Bassam worked at several private companies that focus on system automation and applied his knowledge into building practical system. Bassam has extensive program/group management, project leadership, research, systems engineering, and integration and test experience. This experience spans many program areas especially Air Traffic Management, Autonomous Systems, Machine Learning and Data Mining. In addition, he has extensive experience in the Robotics field that includes EO/IR, radar, and acoustic sensors, robot path planning, image processing, image understanding, fault identification, and autonomous system operation.