

RIT

Center for
Human-aware
Artificial
Intelligence



CHAI Seminar Series

DATE: **Monday, March 21, 2022, 12:00-1:00 PM**

SPEAKER: **Adrian Stoica, PhD**
Senior Research Scientist and Principal
NASA Jet Propulsion Laboratory (JPL)

TITLE: **On Telepresence, Telerobotics and Autonomy**

REGISTRATION LINK: https://rit.zoom.us/webinar/register/WN_KrFMurTIQH2chCwZCLIGNA

ABSTRACT: Decades after first used to control operations in hazardous environments and in space, telerobotics, combined with autonomy, is getting ready to significantly impact our lives in major ways. In 1980, MIT Professor and AI pioneer, Marvin Minsky's words predicted a revolutionary change: "Telepresence is not science fiction. We could have a remote-controlled economy by the twenty-first century if we start planning right now". While the progression was slower, several recent events, in particular the global pandemic, provided a boost to the 'tele' revolution. From tele-health to tele-education and teleoperation in several industrial sectors, we are seeing the appearance of a large number of applications that will irreversibly change how we work and live. The talk will overview technical aspects of telepresence, and discuss services that are appearing as technology in research labs matures and products move to consumers. It will highlight the symbiosis between teleoperations and autonomy, and the role of AI. It will describe the current activities in preparation for a future IEEE Initiative in Telepresence.



BIO: **Adrian Stoica, PhD** is a Senior Research Scientist and Principal at NASA Jet Propulsion Laboratory (JPL). He has 35 years of R&D experience, the last 25 years at JPL, where he was Principal Investigator for many government projects funded by NASA and other agencies. He supervised the JPL Robotic Systems Decision, Estimation, and Controls Group for 10 years, and is now Program Manager in the Office of Strategic Planning. He joined IEEE in 1992 and has volunteered in several IEEE societies and units; he served twice as Vice-President of the IEEE Systems, Man, and Cybernetics Society. Adrian is a NASA Innovative Advanced Concepts (NIAC) Fellow. He founded 3

conferences on adaptive systems for space, quality of life, and secure technologies. His expertise and passion covers several areas including intelligent machines, telepresence, robotics, human-machine systems and space exploration.

<https://www.rit.edu/chai>