The Field Robotics Center

Seminar Series

Wednesday, Sept 25 NSH 1305 12pm-1pm

Food and Drinks will be served

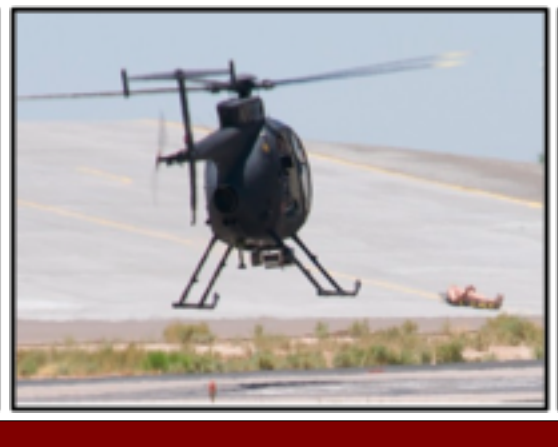
Issa Nesnas
Robotic Mobility Group Supervisor
Principal Member of Technical Staff
Jet Propulsion Laboratory

Planetary Robotic Exploration: Mobility and Autonomy

Abstract: The success of the Mars rovers has provided a wealth of information leading to major scientific discoveries. Planetary mobility has proved to be an invaluable tool of surface exploration, complementing orbital observations. In this talk, Dr. Nesnas will provide an overview of advances in robotic autonomy that have contributed to the success of the Spirit and Opportunity rovers, and are starting to contribute to the operation of the Curiosity rover. He will also describe advances in mobility and sampling that would allow future rovers access to extreme terrain topographies, such as crater walls, gullies, canyons and skylights on the Moon and Mars. He will also describe on-going work with microgravity mobility and share results from several rover deployments and field trials.

Speaker Bio: Issa Nesnas is a principal member of the technical staff at the Jet Propulsion Laboratory and the supervisor of the Robotic Mobility group. He is leading research in extreme terrain mobility and microgravity mobility projects, in collaboration with university partners. Prior to that, he led a multi-center project for developing reusable robotic software for advanced robotic autonomy. He also contributed to developments in autonomous rover navigation and visual target tracking and participated in the development of the Curiosity rover. He received a B.E. degree in Electrical Engineering from Manhattan College in 1991, and earned the M.S. and Ph.D. degrees in robotics from the Mechanical Engineering Department at the University of Notre Dame in 1993 and 1995 respectively.






For further information please contact: Uland Wong, uyw@andrew.cmu.edu. ***www.frc.ri.cmu.edu***