

Control and Dynamical Systems & Aerospace

Session **I**

Room: 133 Guggenheim

1:20 - 1:40 PM	Baaqer M. Farhat <i>Chung Ip Wing-Wah Memorial SURF Fellow</i>	Perception-Based Collision Avoidance for Multi-Agent Systems	Soon-Jo Chung <i>Bren Professor of Control and Dynamical Systems; Senior Research Scientist, JPL</i> Aaron D. Ames <i>Bren Professor of Mechanical and Civil Engineering and Control and Dynamical Systems</i>
1:40 - 2:00 PM	Agnes M. Göransson Lund University	Toward Shoreline-aware Thermal Water Segmentation for UAVs in Near-shore Environments	Soon-Jo Chung <i>Bren Professor of Control and Dynamical Systems; Senior Research Scientist, JPL</i> Matthew Anderson <i>Staff Scientist in Computing and Mathematical Sciences</i> Joshua Cho <i>Research Engineer in Aerospace</i> Anahita Eshghetorki <i>Graduate Student in Mechanical Engineering</i>
2:00 - 2:20 PM	Narek Harutyunyan Brown University	ContractionPPO: Certified Reinforcement Learning via Differentiable Contraction Layers	Soon-Jo Chung <i>Bren Professor of Control and Dynamical Systems; Senior Research Scientist, JPL</i> Matthew Anderson <i>Staff Scientist in Computing and Mathematical Sciences</i>
2:20 - 2:40 PM	Hongyi Hu <i>Class of '52 SURF Fellow</i>	Investigating Map-free Thermal Navigation for Aerial Robots in Low-light, Over-water Environments Using Imitation Learning From Traditional Planners	Soon-Jo Chung <i>Bren Professor of Control and Dynamical Systems; Senior Research Scientist, JPL</i> Xingxing Zuo <i>Postdoctoral Scholar Research Associate in Computing and Mathematical Sciences</i> Nikhil Ranganathan <i>Graduate Student in Aerospace</i>
2:40 - 2:50 PM	BREAK		

2:50 - 3:10 PM	Brandon Lee <i>Mary P. and Dean C. Daily SURF Fellow</i>	Extreme Atmospheric Wind Sensing and Quantification for Adaptive Control of a Fixed-wing UAV	Morteza Gharib <i>Hans W. Liepmann Professor of Aeronautics and Medical Engineering</i> Xiaozhou Fan <i>Postdoctoral Scholar Research Associate in Aerospace</i>
3:10 - 3:30 PM	Maxwell B. Braithwaite	Experimental Study of New Flexible Solar Array	Sergio Pellegrino <i>Joyce and Kent Kresa Professor of Aerospace and Civil Engineering; Senior Research Scientist, JPL</i> Maria Kechri <i>Graduate Student in Aerospace</i>
3:30 - 3:50 PM	Mason M. Holmes Johns Hopkins University <i>Carl F. Braun WAVE Fellow</i>	High-throughput, High-strain-rate Material Testing and Characterization via Automated Rapid Direct Impact Tester (ARDIT) for Predictive Modeling	Guruswami Ravichandran <i>John E. Goode, Jr., Professor of Aerospace and Mechanical Engineering</i> Aditya B. Shedge <i>Graduate Student in Mechanical Engineering</i>
3:50 - 4:10 PM	Jason M. Kamau <i>M.A.Q. Lutful Haq SURF Fellow</i>	Advancing ASTM E659 Testing: Investigating and Optimization of the Current ASTM Testing Methods and Apparatus	Joseph E. Shepherd <i>C.L. "Kelly" Johnson Professor of Aeronautics and Mechanical Engineering</i> Charline Fouchier <i>Postdoctoral Scholar Fellowship Trainee in Aerospace</i>