

## Artificial Intelligence Seminars

## Intelligent Decision Making for Next Generation Air Transportation Systems

Speaker Dr. Jun Chen Assistant Professor Department of Aerospace Engineering San Diego State University

Where GMCS-405

When 10:30am-11:30am, November 22nd, 2019

## Speaker

Jun Chen, Ph.D. (Purdue University 2018), is an Assistant Professor of Aerospace Engineering Department at San Diego State University. Dr. Chen's research area includes dynamics, control, machine learning and artificial intelligence, particularly in data-driven modeling, control and optimization for large-scale networked dynamical systems, with applications in mechanical and aerospace engineering such as air traffic control, traffic flow management, and autonomous air/ground vehicle systems. He is presently researching the implementation of artificial intelligence in aerospace engineering and broader intelligent transportation system. He received a M.S. degree in Aerospace Engineering from Purdue University and a B.E degree in Aeronautics Engineering from Beihang University, China. He is a recipient of the Purdue College of Engineering Outstanding Research Award in 2018.

## Abstract

With the booming of deep learning and artificial intelligence in a new era, the field of systems and control has recently been facing newly emerged research in control and optimization of large-scale networked autonomous systems, most of which heavily rely on the fidelity of the models and efficient computational techniques to execute optimized control actions. Meanwhile, the physical autonomous systems are inherently subject to uncertainties and disturbances. This seminar will present a suite of modeling, optimization, and computation algorithms and tools that can efficiently support intelligent decision making in large-scale autonomous systems, with a focus on the national air transportation system applications.

Host: Dr. Xiaobai Liu Student Organizer: Patrick Perrine Web: sdsuai.home.blog