Proposal for Invited Session on

### Unmanned aerial vehicle system control and application

for

The 2020 International Conference on Guidance, Navigation and Control (ICGNC 2020) August 7-9, 2020, Tianjin, China

by

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**Chairs**:

Delin Luo is an associate professor of School of Aerospace Engineering, Xiamen University. He obtained B.S. degree in automatic control form Harbin Institute of Technology in 1991, and M.S degree and PH.D degree in Navigation, Guidance & Control from College of automation, Nanjing University of Aeronautics and Astronautics, in Jan. 2002 and July, 2006, respectively. From 1991 to 2006, he was a senior engineer with Chinese Helicopter Research and Development Institute and worked on the helicopter avionics system design. In 2006, he transferred to work in School of Information Science and Technology, Xiamen University of Singapore. His research interest includes flight vehicle guidance and control, multi-agent coordinated control, computational intelligence.

### Co-chair:

Yanbin Liu is an associate professor of the College of Astronautics, Nanjing University of Aeronautics and Astronautics. He obtained B.S. degree in Applied Physics from Central South University in 1998, and PH.D degree in Navigation, Guidance & Control from College of automation, Nanjing University of Aeronautics and Astronautics, in June, 2007, respectively. From 2007 to 2010, he was an assistant professor of College of Astronautics, Nanjing University of Aeronautics and Astronautics. From Dec. 2013 to Dec. 2014, he made an academic visit on the UAV team of National University of Singapore. His research interest includes hypersonic flight control, aircraft modeling, and advanced flight control methods.

#### **Motivation and Objectives**

The control of Unmanned Aerial Vehicle (UAV) is key technology to realize automatic flight for UAV. With the rapid development of UAV technology, various UAVs are being used to execute complicated missions. This poses great challenges to performance of the designed UAV control system. The proposed invited session aims to provide a platform for UAV system researchers and engineers to report their forefront research and latest developments on different topics pertaining to UAV control approaches and its applications. Research efforts arising from academic institutions in China are consolidated to provide a broader prospective, while fostering closer collaborations between various research institutions. It also aims to provide potential readers with a comprehensive background of state-of-the-art UAV control approaches and applications. This allows fellow researchers in this exciting research arena to have a gateway on improving stability, robustness, and overall performance of the UAV control system design, and to retain competitiveness in this rapidly progressing field.

# Submission of Papers:

All paper should be written in English using templates provided by the conference. Authors are requested to submit papers in full version online referring to the website at <u>http://icgnc.buaa.edu.cn/cn/</u> submission/.

# Important dates:

Deadline for Manuscript Submissions:	March 5, 2020
Notification of Acceptance:	April 15, 2020
Submission of Final Papers:	May 15, 2020