

2025 INTERNATIONAL CONFERENCE ON UNMANNED AIRCRAFT SYSTEMS (ICUAS '25)



May 14 - 17, 2025
Charlotte, NC, USA
www.uasconferences.com



INTERNATIONAL ADVISORY COMMITTEE

Luis Mejias Alvarez, Queensland U of Technology
Mário Sarcinelli-Filho, Federal Univ. of Espirito Santo
Anna Konert, Lazarski University
Andrea Monteriu, UNIVPM
Sami Sundström, Finnish Defence Forces
Didier Theilliol, Université de Lorraine
Nikos Tsourveloudis, Technical University of Crete
Anthony Tzes, NYU Abu Dhabi
Begoña C. Arrue Ulles, University of Seville
Youmin Zhang, Concordia University

ICUAS ASSOCIATION LIAISON

Kimon Valavanis, University of Denver

HONORARY CHAIR

Ella Atkins, Virginia Tech

GENERAL CHAIRS

Nikos Vitzilaos, University of South Carolina
Giuseppe Loianno, New York University

PROGRAM CHAIRS

Marco Tognon, INRIA Rennes
Salua Hamaza, TU Delft
Nitin Sanket, Worcester Polytechnic Institute

INVITED SESSIONS CHAIRS

Kalinka Branco, University of São Paulo
Alejandro Suarez, University of Seville

TUTORIAL AND WORKSHOP CHAIRS

Kerstin Haring, University of Denver

UAV COMPETITION CHAIR

Frano Petric, University of Zagreb

LOCAL ARRANGEMENTS & EXHIBITS CHAIR

Artur Wolek, University of North Carolina Charlotte

REGISTRATION & PUBLICITY CHAIR

Nadia Danezou, ICUAS Association, Inc.

PUBLICATION CHAIR

Simone Martini, University of Denver

WEB SERVICES CHAIR

Panos Valavanis, Dark Wolf Solutions

IEEE CSS LIAISON

Panos Antsaklis, University of Notre Dame

IEEE RAS LIAISON

Paul Oh, University of Nevada, Las Vegas



For information related to **ICUAS '25** e-mail
Kimon Valavanis, kvalavanis@icuas.com.

ICUAS

The 2025 International Conference on Unmanned Aircraft Systems, **ICUAS '25**, will take place on May 14-17. It is organized in Charlotte, NC, the second-largest banking center in the United States. The **ICUAS '25** venue is on the campus facilities of the University of North Carolina at Charlotte. Charlotte is easily accessible via the Charlotte Douglas International Airport. The city offers many attractions including the Sullenberger Aviation Museum, U.S. National Whitewater Center, Carowinds Amusement Park, the Charlotte Motor Speedway, and other cultural amenities and entertainment sites.

ICUAS '25 centers around civil and public domain applications, and on the impact of unmanned aviation to society. Technical challenges cover a wide spectrum of topics; however, emphasis is given to: Aerial Manipulation, Morphological Designs of Aerial Robots, Bio-inspired Aerial Robots, UAV Design for Resilience, Multi-mode Unmanned Platforms, Swarms and Multi-UAVs systems, Learning-based Perception, Navigation & Control, Efficient, Online Autonomy, Applications of Aerial Robots, Human Factors and Ethical AI for Aerial Robots, Regulations and Policies for Autonomous Operations, and, Integration into the National Airspace.

ICUAS '25 brings together, under one forum, national and international organizations, federal agencies, industry, private sector, authorities, end-users, and practitioners, working towards defining roadmaps of UAS, setting expectations, technical requirements and standards that are prerequisite to their full utilization and integration into the national airspace. Special emphasis is given to research opportunities, and to 'what comes next' in terms of tools and support technologies that are needed to advance the state-of-the-art.

ICUAS '25 offers unique opportunities to meet, interact and shape the future of unmanned aviation, worldwide, bringing together technical, regulatory, and legal communities. Details and logistics about the conference can be found at <http://www.uasconferences.com> and related links. The conference is fully sponsored by the **ICUAS Association, Inc.**, a non-profit organization, see www.icuas.com. It is technically cosponsored by the IEEE Control Systems Society, the IEEE Robotics and Automation Society, and the Mediterranean Control Association.

Part of **ICUAS '25** is the **UAV Competition**. The Competition is student-focused and student-centered, offering unique opportunities for students to test and compare their skills with those of their peers worldwide. The competition is organized in two stages: simulation qualifiers and in-person finals. The finals will take place during the conference, allowing students to meet and participate in the conference, too. Details on how to participate in the UAV Competition are available on the conference website.

CONFERENCE STRUCTURE

ICUAS '25 is a 'physical presence only' four-day event. May 14-16 spans the three-day technical conference and the UAV Competition. May 17 is devoted to Workshops and Tutorials.

IMPORTANT DUE DATES

| | |
|---------------------------------------|--|
| February 7 February 4, 2025: | Full Papers / Invited Sessions / Tutorial Proposals Due |
| February 28 February 10, 2025: | UAV Competition: simulation-based scenario |
| March 28 March 25, 2025: | Acceptance / Rejection Notification |
| March 28 – April 11, 2025: | Early Registration and Upload Final, Camera-Ready Papers |

SUBMISSIONS

Papers: Paper format (two-column) follows IEEE guidelines. Electronic submission will be handled through PaperCept - details are available on the conference web site. Submitted papers should be classified as *Contributed* or *Invited Session* (max. 8 pages) papers. All accepted papers will be allowed up to two additional pages for an extra charge per additional page. Novel and cutting-edge ideas showing future potential based on supported preliminary results, however, not yet fully developed, are encouraged.

Invited Sessions: Proposals for invited sessions should contain a summary statement describing the motivation and relevance of the proposed session, the invited paper titles, and the names of the authors. Authors must submit FULL invited papers. Each paper must be marked as "Invited Session Paper".

Workshops and Tutorials: Proposals for workshops and tutorials should contain a title, the list of speakers, and extended summaries (2000 words) of their presentations. All contributions (papers, invited papers, proposals for invited sessions, proposals for workshops and tutorials) must be submitted electronically through <https://controls.papercept.net> by the due date.

Paper Review Process: All submitted papers will undergo a thorough peer review process coordinated by the Program Chairs, Advisory Committee Members, IPC members, Associate Editors, and qualified reviewers. Each paper will be reviewed by (at least) three qualified reviewers. Each Associate Editor will make recommendations. The Program Chairs will finalize and announce decisions by the due date. Each submitted paper will be checked for originality through the iThenticate Plagiarism Detection Software.