# **IOUAS** Association eUAM

## The Unmanned Aviation eMagazine

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## **EDITORIAL**

In this Spring issue of the *Unmanned Aviation eMagazine*, the *eUAM*, we focus on the aftermath of the annual Conference that took place on May 14-17, on the campus of the University of North Carolina at Charlotte (UNCC), on presenting the results of the survey that followed the Conference and on introducing ICUAS 2026.

Centering on the annual Conference, it is obvious that our common and unique objective is to strengthen it, improve quality and make it more appealing. Several conversations already have taken place, and suggestions and recommendations are on the table for consideration. As such, and as a first step, a 'position statement' is presented with the aim to provide accurate information and clarifications about the organization of the Conference and associated constraints. Immediate actions have been taken to make the 2026 Conference more appealing and of better quality.

#### I&UAS 2025 REPORT

The 2025 International Conference on Unmanned Aircraft Systems (ICUAS 2025) took place in Charlotte, NC, USA. The Conference venue was the *Popp-Martin Student Union* at the University of North Carolina at Charlotte (UNCC). UNCC was one of the sponsors of the event, along with the University of South Carolina, the University of Denver and the University of Zagreb. The Conference

was Technically Supported by the IEEE CSS and RAS, by the Mediterranean Control Association (MCA), and the ICUAS Association.

ICUAS 2025 spanned four days; the three-day Technical Conference took place on May 14-16, while the last day, May 17, was reserved for Tutorials and Workshops. The Conference was



Conference committee members with keynote speaker Dr. Jonathan How. From left to right: Drs. Jonathan How, Marco Tognon, Nitin Sanket, Salua Hamaza, Nikos Vitzilaios and Artur Wolek.

attended by more than 200 participants who represented academia, industry, government agencies, lawyers, policy makers, manufacturers, students, and end-users.

ICUAS 2025 focused on: Aerial Manipulation; Morphological Designs of Aerial Robots; Bio-inspired Aerial Robots; UAV Design for Resilience; Multi-mode Unmanned Platforms; Multi-UAV Systems; Learning-based Perception, Navigation and Control; Autonomy; Human Factors and Ethical AI for Aerial Robots; and Regulations and Policies for Autonomous Operations.

The Technical Program was composed of 158 peer-reviewed papers (contributed and invited) from 33 countries: Argentina, Australia, Austria, Brazil, Canada, China, Colombia, Croatia, Cyprus, Denmark, France, Germany, Greece, India, Israel, Italy, South Korea, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Qatar, Russia, Singapore, Spain, Sweden, Switzerland, Turkey, United Arab Emirates, United Kingdom, and USA. The paper review process was very thorough, and, as in previous years, all papers were also checked following the *iThenticate Document Viewer Guide* before a final decision was made. The three-day technical Conference included 23 Regular Sessions, 3 Invited Sessions, and 2 Best Paper Award Sessions.

The ICUAS 2025 Best Paper Award was given to Jess Stephenson, William S. Stewart, and Melissa Greeff, Queen's University, for their paper entitled "A Time and Place to Land: Online Learning-Based Distributed MPC for Multirotor Landing on Surface Vessel in Waves".

The Africa – Latin America (A-LATAM) Best Paper Award was given to G. Torre, C. L. Pose, and J. I. Giribet, Universidad De San Andres and Universidad De Buenos Aires, for their paper entitled "Propeller Damage

The Conference included two half-day Workshops and Tutorials that were offered on May 17, focusing on:

Detection: Adapting Models to Diverse UAV Sizes".

- Modeling, Autonomous Navigation and Control of Multirotor UAVs: Merging Conventional and Proposed New Methodologies
- Embodied-Al for Aerial Robots: What do we need for full autonomy?

Moreover, ICUAS 2025 included three Plenary Lectures given by leading authorities in their fields:

- Shields up: Building Defense Minded UAVs, Dr. David Casbeer, Air Force Research Laboratory—Aerospace Systems Directorate
- Fast, Efficient, and Robust Autonomy for Unmanned Aerial Systems, Dr. Jonathan How, Massa-



Dr. Artur Wolek introducing keynote speaker Dr. David Casbeer.

chusetts Institute of Technology

• What's the Problem? Challenges in Multirotor Research, Dr. Pauline Pounds, University of Queensland

An integral component of the annual Conference is the UAV Competition, which is student-focused and student-centered, and offers unique opportunities for students to test and compare their skills with those of their peers worldwide.

This year, the UAV Competition was sponsored by two Platinum Sponsors, *Bitcraze* and *NaturalPoint*. *Bitcraze* supplied a fleet of Crazyflies, spare parts, and their Locomotion tracking system, while *NaturalPoint* supplied and installed their Optitrack motion capture system for the competition requirements.

The UAV Competition was organized in two stages: simulation qualifiers and in-person finals. The UAV Competition focused on deploying a team of UAVs in an urban environment to locate and identify (potential) threats. UAVs were deployed from a 'base', and they needed to find and identify several targets in a known environment. Since some of the threats could interfere with communication links between the UAV agents, the UAV team was required to keep constant communication between the base and all UAV agents.

To make the competition challenging, each solution was

evaluated following a two-phase process and two different 'worlds', i.e., two working environments. The first working environment was given to the teams during the simulation phase; however, the second working environment was not seen by the teams.

Following a rigorous evaluation procedure, five teams qualified for the real-time finals:

- AlRo Lab, The Hong Kong Polytechnic University, China
- Center for Scientific Innovation and Education -CSIE, Armenia
- Aerial Robotics IITK, Indian Institute of Technology, Kanpur, India
- AGH AVADER, AGH University of Krakow, Poland
- KNU ARRF, Kyungpook National University (KNU), South Korea

The *Aerial Robotics IITK* team won the UAV Competition. The team members were Prof. Ketan Rajawat (Advisor), Pulak Gautam (Leader), and Varun Sappa, Vihaan Sapra, Akshat Jain, Shvetang Rao, Ayyappan Atulya Sundaram, Shruti Dalvi, Aman Singh Gill, Anmoldeep Singh Dhillon, Sanskar Yaduka (Members).

Kimon Valavanis Nikolaos Vitzilaios Giuseppe Loianno



Conference participants during the UAV competition finals.

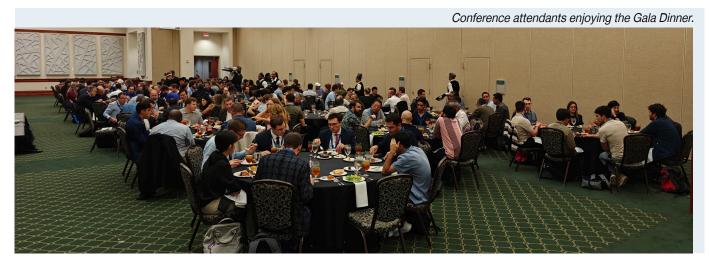




The Program Chairs with the Best Paper Award winners.



The Program Chairs with the A-LATAM Best Paper Award Winner.

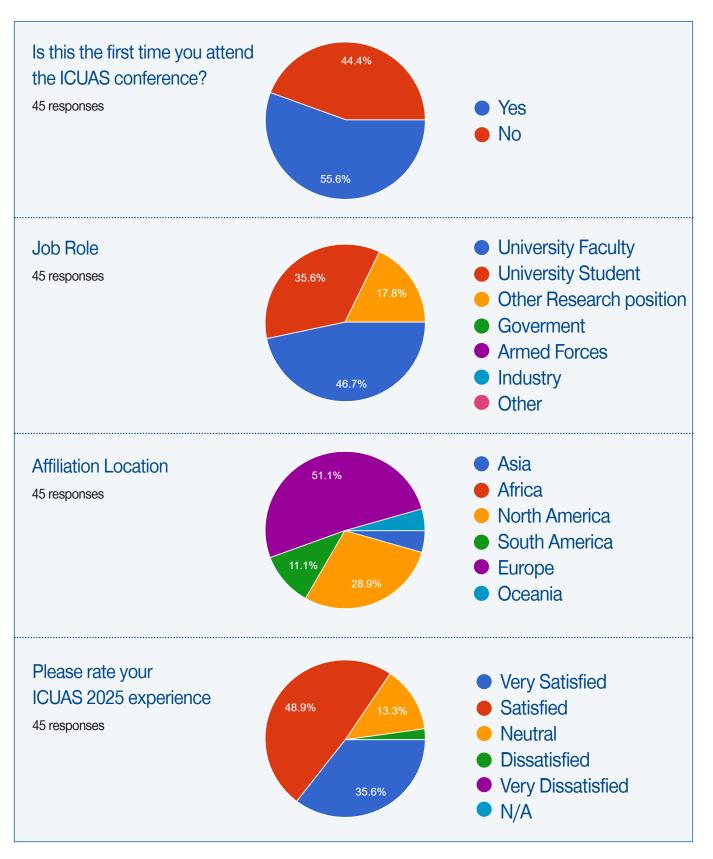


## **SURVEY** RESULTS

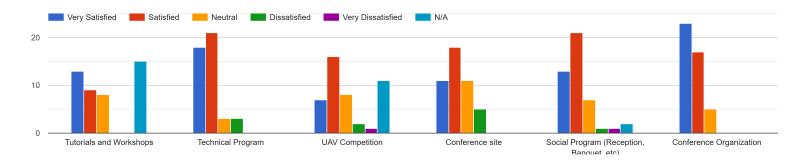


- ONLINE SURVEY FROM MAY 23-JUNE 9, 2025
- SENT TO ALL ICUAS 2025 REGISTERED ATTENDANTS
- 13 QUESTIONS IN TOTAL
- RECEIVED 45 RESPONSES

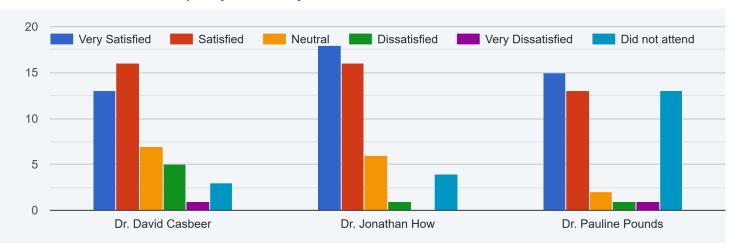
A survey was sent to all participants with the aim to solicit feedback to improve future meetings. The results of the survey are shown next.



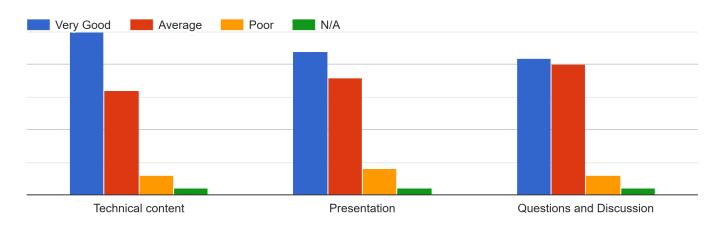
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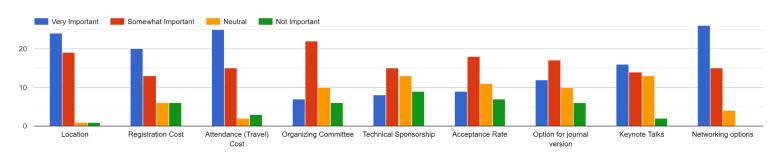
## Please rate the quality of the keynote talks:



## Please rate the quality of the papers:

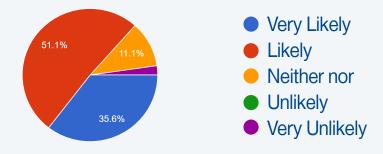






## How likely are you to attend ICUAS 2026?

25 responses



The results of the survey show an overall positive opinion of the Conference. Most participants are happy with the Conference organization. However, there are concerns, and rightly so! Positive and negative feedback points to the right direction as the common goal is to: continue strengthening and expanding the conference; making it more appealing; improving the quality of the accepted papers, thus, lowering the paper acceptance rate (very important comment).

To be more specific and to the point, received comments and feedback address the following:

- Stricter and tighter paper selection after the peer review process, which will decrease the percentage of accepted papers and improve quality.
- Include round table discussions that address timely and challenging topics in unmanned aviation.
- Given the vast and diverse thematic nature of the Conference, it will be beneficial to start with sessions that are dedicated to discussing current challenges in unmanned aviation, i.e., precision agriculture, or UAVbased cargo transportation systems. Consequently, accepted papers could be part of these dedicated

- sessions, which will serve as a Workshop, leading to more in-depth discussions and engagement.
- Provide 'incentives' for participants to also attend Workshops. This may materialize by including the Workshop fee in the main Conference Registration, or offering a 'Bundle' Registration, Conference and Workshop (any Workshop). In this way, the Conference experience will become richer, and the Conference will attract more participants.
- Make sure that all accepted papers are presented; there should be no 'no-show papers'. No-show papers, not presented papers during the Conference, should not be included in the final Proceedings of the Conference.
- There should be one Best Paper Award.
- Organize dedicated networking sessions or social events for PhD students to meet with other researchers and participants.

Additional comments relate to location preferences, US versus Europe, and to organizing the Conference in one venue - hotel, which allows for all participants to be in one place throughout the Conference.

### I&UAS CHALLENGES, CLARIFICATIONS AND REALITY - A POSITION STATEMENT

The central objective of the annual International Conference on Unmanned Aircraft Systems is to register the state-of-the-art in unmanned aviation, and to discuss 'what comes next' in terms of basic and applied research and development, tools and support technologies that are needed to advance unmanned aviation.

The legal entity that sponsors financially (100%) the annual Conference is the ICUAS Association, Inc., a nonprofit organization registered in the State of Colorado. The main, major, activity of the Association is the organization of the annual Conference. All Conference expenses are covered by registrations (regular, student, retiree), which are the only revenue of the Association. The Conference is technically co-sponsored (no financial support) by the IEEE CSS and RAS, and the Proceedings have been acquired thus far by IEEE (CSS) and have appeared on IEEE Xplore. A couple of other companies and non-profit organizations (i.e., the Mediterranean Control Association) also support the Conference, along with 1-2 sponsors (i.e., MDPI that provides a \$3,000.00 support) and exhibitors – all these details are on the Conference web. If the Conference expenses are more than the revenue, the loss is covered by the ICUAS Association, Inc., reserves (if any), or by personal funds (yes, this is the case), not IEEE.

Regardless, considering all comments and recommendations, and to continue improving the Conference reputation and visibility, the following steps and actions are proposed (most will be implemented in ICUAS 2026):

- Seek wider IEEE support from more Societies.
- Seek longer term Memorandum of Understanding, MOU, with IEEE Societies, which will enhance the Conference reputation further.
- Approach other organizations like AIAA, IFAC, etc., to establish collaboration and request technical co-sponsorship.
- Enhance industry participation and identify 'key' companies in unmanned aviation to sponsor the Conference.
- Improve the paper review process, accept only the best papers, thus, reducing acceptance rate.
- Organize round table and panel discussions as part of the conference and invite experts in the field to participate in such discussions.
- Improve the UAV Competition; invite companies to sponsor the event and donate equipment to run the competition.

The above points are just the first steps of a long process to make the Conference more visible! Results will be evaluated after ICUAS 2026, and further steps will be adopted.

## **2026 ICUAS**

The 2026 ICUAS will take place on June 15-18, in Corfu, Greece. The venue is the luxurious Divani Corfu Palace, <a href="https://divanicorfuhotel.com">https://divanicorfuhotel.com</a>. For details and information about Corfu, click on <a href="https://visit.confu.gr">https://visit.confu.gr</a>. We have secured the best room rates for the conference participants and their families. The location offers many advantages to combine business and pleasure and bring all of us under one roof, the venue. Plan ahead, mark your calendars and be prepared for an experience second to none.





## **I**©UAS Association *eUAM*

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#### 2026 INTERNATIONAL CONFERENCE ON UNMANNED AIRCRAFT SYSTEMS (ICUAS '26)



# JUNE 15-18, 2026 DIVANI CORFU PALACE https://divanicorfuhotel.com

Corfu - Greece





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The **2026** International Conference on Unmanned Aircraft Systems, ICUAS '26, will take place in Corfu, Greece, on June 15-18, in the luxurious resort Divani Corfu Palace. Corfu is easily accessible from Athens and Thessaloniki and from many European cities during the tourist season. The location offers the perfect place for business, pleasure and vacations.

ICUAS '26 centers around a wide spectrum of topics. However, emphasis is given to: Soft aerial robots; Cooperative aerial manipulation; Bio-inspired aerial robots; Aerial robot aerodynamics; Reconfigurable UAVs; Multi-mode unmanned platforms; Learning-based perception, navigation and control; Online autonomy; Real-time applications; Human factors and ethical AI for aerial robots; Regulations, policies and safety. Round table discussions will complement the technical sessions.

In addition to the technical sessions, a twofold objective is: i.) Industry and company participation for registrees to find out about the current state of technology and of commercially available products for civil and public domain applications, and ii.) Understanding technical requirements and standards that are prerequisite to UAS full utilization and integration into the national airspace.

Part of ICUAS '26 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.

ICUAS '26 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 <a href="https://www.uasconferences.com">https://www.uasconferences.com</a> and related links. The conference is fully sponsored by the ICUAS Association, Inc., a non-profit organization, see <a href="https://www.uasconferences.com">www.icuas.com</a>.

#### **CONFERENCE STRUCTURE**

ICUAS '26 is a 'physical presence only' four-day event. June 15 is reserved for Workshops and Tutorials, while June 16-18 spans the three-day technical conference and the UAV Competition.

#### IMPORTANT DUE DATES

February 20, 2026: Full Papers/Invited Sessions / Workshop and Tutorial Proposals, Due

February 6, 2026: UAV Competition: simulation-based scenario

April 20, 2026: Acceptance / Rejection Notification

April 20-30, 2026: Early Registration and Upload Final, Camera-Ready Papers

#### SUBMISSIONS

All contributions (papers, invited papers, proposals for invited sessions, proposals for workshops and tutorials) must be submitted electronically through <a href="https://controls.papercept.net">https://controls.papercept.net</a> by the due date.

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. Accepted papers only will be allowed up to two additional pages for an extra charge per additional page.

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.

Paper Review Process: All submitted papers will undergo a thorough peer review process coordinated by the Program Chairs, 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. The paper review process will be observed by the supporting technical society representatives.