



CALL FOR PAPERS
SPECIAL SESSION ON
Opportunities for Predictive Maintenance for Urban and Advanced Air Mobility
for ICCAD'23
May 10-12, 2023, Rome-Italy

Session Co-Chairs:

- Dr. Eric Bechhoefer, GPMS International Inc, USA, eric@gpms-vt.com
- Gaurav Makkar, PhD Candidate, Center for Mobility with Vertical Lift, Rensselaer Polytechnic Institute.
- Prof. Lotfi Saidi, University of Sousse- Tunisia, lotfi.saidi@essths.u-sousse.tn
- Manu Krishnan, PhD, Sr. Data Scientist at Joby Aviation, manukrishnantvm@gmail.com
- Prof. Christian Janke, College of Aviation, Program Coordinator, Embry-Riddle, Christian.Janke@erau.edu

Session description:

Urban and Advanced Air Mobility (UAM/AAM) envisions a safe and efficient aviation transportation system using highly automated aircraft that will operate and transport passengers or cargo at lower altitudes within urban and suburban areas or inter-city applications.

Success in this emerging market will depend on the safe and affordable transportation of passengers and goods. Predictive maintenance can help improve safety while allowing increased operational availability while reducing unscheduled maintenance.

The topics of interest include, but are not limited to:

- Machine Learning and Artificial Intelligence based predictive maintenance strategies and algorithms
- Use of Predictive Analytics to inform air vehicle control algorithms
- Application of Predictive Analysis in support of Safety Management Systems and Air Space Deconfliction
- Advanced Analytics for Diagnostics/Prognostics of Motors Drives to achieve an On-Condition maintenance capability
- Condition Monitoring of Actuators to improve safety and reliability

SUBMISSION

Papers must be submitted electronically for peer review by: **January 31, 2023**
[Submission – ICCAD 2023 \(iccad-conf.com\)](https://www.iccad-conf.com)

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).