



## Robust Autonomy for Aerial Robotics

A Special Track of the  
12<sup>th</sup> International Symposium on Visual Computing (ISVC16)

<http://www.isvc.net/>

December 12–14, 2016

Las Vegas, Nevada, USA

### Scope

Aerial robots are currently at the forefront of robotic research and have managed to raise great interest within our societies. Market estimates predict a –wider than ever expected– vast integration of such technologies in a variety of commercial and professional applications. Enabling factors for this trend are the miniaturization and great cost reduction of the enabling technologies, in combination with the dazzling progress in the fields of modeling and aerodynamics, pioneering mechanical design, avionics, advanced motion control, machine learning, sensing and estimation, computer vision, path planning, decision–making and autonomous behaviors, distributed, networked and multi–agent systems, as well as human–robot interaction. Within this special track, we aim to investigate and discuss what is still missing towards achieving advanced navigational and operational autonomy for aerial robots. Towards a productive event, we welcome papers from all the relevant scientific fields and disciplines, solid contributions or promising preliminary results that break new ground and try to advance, robustify and increase the reliability of aerial robots. Furthermore, we invite application–oriented papers that present new methods and solutions towards the goal of integrating aerial robotics as a new class of intelligent agents able to support our collective societal needs.

### Topics

The topics of interest of this special track include but are not limited to the following areas:

- Applications of Aerial Robotics
- Autonomous Navigation
- Big–Data and Aerial Robots
- Distributed Systems
- Energy Efficient Aerial Robotics
- Fault–Tolerant and Fail–Safe Systems
- Field Robotics
- Flight Control Systems
- Guidance and Navigation
- Human–Robot Interaction
- Machine Learning for Aerial Robots

- Motion Control
- Multi-Robot Systems
- Networked Systems
- Path Planning
- Robotic Vision for Aerial Robots
- Sensor Technologies
- Simulation and Modeling
- Simultaneous Localization And Mapping
- State Estimation and Sensor Fusion

## Paper Submission Procedure

Papers submitted to this ISVC 2016 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **12 pages**, including figures and tables (see <http://www.isvc.net> for details). All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.



## Important Dates

<b>Paper submission:</b>	<i>August 20, 2016</i>
<b>Notification of Acceptance:</b>	<i>September 25, 2016</i>
<b>Final Camera Ready Paper:</b>	<i>October 21, 2016</i>
<b>Advance Registration:</b>	<i>October 21, 2016</i>
<b>ISVC Symposium:</b>	<i>December 12–14, 2016</i>

## Organizers

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## Website

**ISVC Conference:** <http://www.isvc.net/>

**Special Track Site:** <http://www.isvc-aerial-robotics.com/>