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Drones Navigation and Orientation

Guest Editors:

Prof. Dr. Costas Armenakis
Geomatics Engineering, Department of Earth and Space Science and Engineering, Lassonde School of Engineering, York University, Toronto, ON M3J 1P3, Canada

Dr. Ismael Colomina
GeoNumerics, 08860 Castelldefels, Barcelona, Spain

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Message from the Guest Editors

Dear Colleagues,

The development of semi-autonomous and autonomous unmanned aerial systems, also known as drones, and their applications is experiencing continuous growth. Drones' success has resulted in increased interest in other types of uncrewed vehicles, from submarines to planetary ground vehicles. Currently, the category 'drone' embraces all types of uncrewed vehicles, from underwater autonomous ones to planetary robots (excluding driverless cars).

For most drone applications, the vehicle's position and attitude—the drone's orientation—is required to exploit the collected data. For all drone operations, knowing the drone orientation in real time—drone navigation—is required. Navigation is a fundamental function of drone guidance, control, and navigation (GNC) systems, often referred to as autopilots. In turn, GNC systems are a necessary subsystem of drones. Both drone orientation and navigation must meet certain performance specifications, often revolving around precision, accuracy, integrity, availability and continuity.

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Special Issue

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Editor-in-Chief

Prof. Dr. Diego González-Aguilera
Cartographic and Land Engineering Department, Higher Polytechnic School of Avila, University of Salamanca, Hornos Caleros, 50 05003 Avila, Spain

Message from the Editor-in-Chief

Drones is an international open access journal focusing on advancing research in drone science, policy, technology, and applications. Today, drones have become indispensable for policymakers, regulatory authorities, mapping agencies, start-ups, and established firms. Their expanding societal and economic relevance is reflected in the rapid development of new sensors, upgraded platforms, specialized software, and novel applications. The journal provides a central forum for scholars in drone research and applications to exchange findings and innovations. With growing demand for high-quality research, our Editorial Board comprises international leaders and experts across relevant scientific areas. We offer rigorous peer review and rapid publication of papers from across all areas of drone science. We welcome you to submit your next paper to *Drones* and to contribute to the continued advancement of and innovations in the field of drones.

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Contact Us

Drones Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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drones@mdpi.com
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