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Frontiers in Mobile Robot Navigation

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Robot navigation remains one of the fundamental topics within the robotics research field. Although many techniques have already been developed, still new techniques appear with the aim to increase the level of autonomy in robot navigation, as well as increase the levels of abstraction, to more closely resemble the way humans navigate with those who are destined to share environments, tasks and communicate.

The objective of this Special Issue is to collect current and future trends in robot navigation in all research areas and levels. These trends include geometric navigation techniques, including geometric modeling and environment modeling. Hybrid and topological navigation techniques are also included with new techniques, such as those used for information on maps, based on multiple levels and new ways of exploring the environment. Finally, the incorporation and handling of semantic information is contemplated.

In short, it is about establishing new frontiers in terms of perception of the environment, modeling of the environment, location, planning and navigation of robots in an environment, both indoors and outdoors.

Dr. Ramon Barber Guest Editor







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Editor-in-Chief

Message from the Editor-in-Chief

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