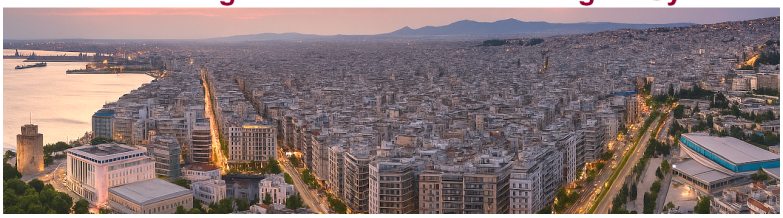
41st ACM/SIGAPP Symposium on Applied Computing, Thessaloniki, Greece, March 23 – 27, 2026

Track on Intelligent Robotics and Multi-Agent Systems



CALL FOR PAPERS

https://www.sigapp.org/sac/sac2026/

The ACM Symposium on Applied Computing (SAC) has been a primary gathering forum for applied computer scientists, computer engineers, software engineers, and application developers from around the world. The technical track on Intelligent Robotics and Multi-Agent Systems (IRMAS) will be organized for the twelfth time in SAC 2026, exploiting the inherent synergy between Robotics and Multi-Agent Systems (MAS), thus aiming to bring together these highly related and exciting research fields.
Robotics is a multidisciplinary research area that presents an enormous potential. It concerns developing intelligent robotic systems that are capable of making decisions and acting autonomously in real and unpredictable environments to accomplish tasks and assist humans in relevant application domains for society. Several complex problems require the use of teams of cooperative robots that share the same challenges studied in MAS.
MAS are groups of intelligent agents that can perceive and act in a given environment to achieve their individual and collective goals. MAS enable solving problems that are beyond the individual capabilities and knowledge of single agents, not suffering from resource limitations, performance bottlenecks, or critical failures usually found in centralized problem solvers. Multi-robot systems are often used to evaluate and validate MAS with physical robot platforms.
For many years, Robotics and Artificial Intelligence (AI) researchers have worked separately in these fields, both fields have matured enormously, and there has been a growing interest in getting the two fields together. Many in Robotics believe that the focus in the near future should be adding capabilities to robots that lie at the core of AI research. Reciprocally, AI researchers aim at embedding their techniques in physical robots that can perceive, reason and act in real, dynamic physical environments. Despite this mutual interest, although there are many conferences focusing either on Robotics or AI separately, there is still a lack of scientific venues where both communities can meet. The purpose of the IRMAS track is therefore to provide a venue to exploit synergies between Robotics and AI, more precisely between Intelligent Robotics and MAS, bringing together researchers from both fields to share experiences, expose issues, and discuss about these exciting fields. Papers that make fundamental contributions in either of these two areas are welcome, and research that spans both areas is especially encouraged. Accepted papers will be included in the ACM SAC 2025 proceedings and published in the ACM digital library, being indexed by Thomson ISI Web of Knowledge and Scopus. Top-quality papers will be possibly invited after the conference for submission, in extended form, to a special issue of an ISI indexed journal.

Topics of Interest

Autonomous robots
Multi-agent systems (MAS)
Multi-robot systems and cooperative robots
Distributed coordination and optimization
Swarm robotics and bio-inspired intelligence
Robot localization, mapping and navigation
Deployment, coverage and patrolling
Informative planning and adaptive sampling
Sensor fusion and multimodal perception
Cooperative and distributed perception
Self-adaptation, deep learning and reinforcement learning
Collaborative robots
Real-world applications of MAS
Human-robot interaction
Human multi-robot interaction
Human-swarm interaction
Field robotics
MAS in mobile ad-hoc sensor networks
Social and service robotics
Microrobotics and nanorobotics
Entertainment and educational robots
Simulation and programming tools for MAS

Important Dates

October 17, 2025 (EST) : Paper submission (**deadline extended – final deadline**)
November 21, 2025 : Author notification
December 5, 2025 : Camera-ready copies

Original papers addressing any of the listed topics of interest (or related topics) will be considered. Each submitted paper will be fully refereed and undergo a blind review process by at least three referees. Paper size is limited to **8** pages. A maximum of 2 additional pages may be included for an additional fee. The reviews will be double-blind: authors' names and affiliations must not appear in the paper, self-citations should be in the third person, and authors must avoid disclosing their identity by any means.
For accepted papers, registration for the conference is required by at least one of the authors or a proxy, who **must** attend SAC and present the paper in person. This is a strict requirement for the paper to be included in the ACM SAC 2026 proceedings.
Graduate students are invited to submit research abstracts (maximum 3 pages) to the Student Research Competition (SRC).

Track Website

https://sac2026-irmas.isr.uc.pt/

Track Chair

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