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Proceedings of the
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The 6th Italian Workshop on
Artificial Intelligence and Robotics

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Preface

The goal of the Italian workshop series on Artificial Intelligence and Robotics (AIRO) is to present, discuss and assess recent advances in the deployment of Artificial Intelligence (AI) methods in Robotics. AI principles and methods play a crucial role in several areas of the robotics research (e.g. field, service, social robotics, etc.) and are pervasively exploited at various levels of robot architectures for different purposes: sensing and perception, reasoning and decision, learning, intelligent control, adaptive and social behavior, verification and validation methods, etc. Starting from these diverse -yet intertwined- research fields, the AIRO workshop series aims at providing an established long-term Italian forum where the AI community and the Robotics community may find an interesting and stimulating common ground. This volume contains the proceedings of the sixth edition of the AIRO workshop¹, which was held in Rende, Italy, on November 22 2019. This edition of the AIRO workshop accepted 9 papers involving 33 authors. The program was structured into three sections *Human-robot interaction*, *Planning and Robotics*, and *Mobile Robots*. The contributions covered several aspects of AI and Robotics in the areas of Industrial, Service and Social Robotics and mainly concerned with the following research topics: human-robot interaction, robot learning, semantic mapping, brain computer interfaces, planning and scheduling, architectures and interfaces for robot control.

The workshop program opened with the keynote talk of Prof. Daniele Nardi, full professor at Sapienza, Università di Roma, titled *S-AvE: Semantic Active Vision Exploration and Mapping for Mobile Robots in Indoor Environments*.

The research topics and the results collected in these proceedings illustrate the work of an active and multidisciplinary research community and confirm the growing interest for a forum where AI and Robotics researchers can find a common ground.

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Workshop Organizers

¹ <https://airo2019.wordpress.com/>

Workshop Organization

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