Proceedings of the
AIRO 2017
The 4th Italian Workshop on
Artificial Intelligence and Robotics

Workshop co-located with AI*IA 2017 Bari, Italy
November 14-15, 2017
https://airo17.wordpress.com/
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 aim 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 third edition of the AIRO workshop1, which was held in Bari, Italy, on November 14-15 2017. This edition of the AIRO workshop accepted 11 papers involving 48 authors. The contributions covered several aspects of AI and Robotics, mainly concerned with the following topics: industrial, assistive, field robotics, human monitoring, activity detection, scene recognition, system assessment and benchmarking.

The program of the workshop was completed by two keynote talks by Prof. Luca Iocchi, from “La Sapienza” Università di Roma, titled Artificial Intelligence & Human-Robot Interaction and by Prof. Antonio Chella, from Università degli Studi di Palermo, titled Towards Robot Consciousness.

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.

Among the numerous people that contributed to the success of AIRO 2017, we would first of all thank the people that submitted their research papers to the workshop and attended to the event. Moreover, we sincerely thank the program committee members for their important work on the reviewing process.

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Workshop Organizers

1 https://airo2017.wordpress.com/
Workshop Organization

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