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Boris De Ruyter · Irene Mavrommati (Eds.)


Ambient Intelligence

15th European Conference, AmI 2019
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Proceedings

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Preface

This volume contains the papers presented at AmI 2019, the 15th edition of the European Conference on Ambient Intelligence, held in Rome, Italy during November 13–15, 2019. AmI 2019 is part of a series of annual conferences, which first took place in 2003 with the EUSAI event in Veldhoven, the Netherlands.

Ambient intelligence refers to normal working and living environments populated with embedded devices that can merge unobtrusively and in natural ways using information and intelligence hidden in the network connecting these devices (e.g. the Internet of Things). Such devices, each specialized in one or more capabilities, are intended to work together based on an infrastructure of intelligent systems, to provide a variety of services improving safety, security, and quality of life in ordinary living, traveling, and working environments.

This year's theme was on "Data-driven Ambient Intelligence" that follows the vision of Calm Technology, where technology is useful but does not demand our full attention or interfere with our usual behavior and activities.

In response to the call for papers, a total 50 submission were received from researchers and practitioners from the fields of science, engineering, and design, all working towards the vision of Ambient Intelligence. Each submission was assigned to at least three Program Committee members, in some cases aided by subreviewers. Out of these, the committee decided to accept 20 full papers. The selection was made by the Program Committee based on originality, quality, and relevance to Ambient Intelligence. The accepted papers are included in this Vol. 11912 of Springer's LNCS.

This year, AmI also solicited short papers of work in progress with substantial interest for the community. In total 11 short papers were accepted for publication, out of which 1 was retracted as the authors could not present it at the event. The selection of the short papers was made by the Program Committee.

Apart from the contributed talks, AmI 2019 included invited presentations by Fabio Paternò, Alex Gluhak, Salvatore Iaconesi, Oriana Persico, and John Pagonis.

Four special interest sessions and hands-on tutorials were held on November 13, 2019:

- Ambient Intelligence for Promoting Sustainable Behaviors
- Edge Machine Learning for Smart IoT Environments
- Ambient Intelligence in the Blockchain Era: How Decentralized Services Can Revolutionize the Traditional Client Server Paradigm in Automation and Ambient Intelligence
- Hands-on Tutorial on Embedded Artificial Intelligence

We wish to thank all authors who submitted their research to this conference, contributing to the high-quality program, the Program Committees for their scholarly effort, and all referees who assisted the Program Committees in the evaluation process.

We thank Springer for sponsoring the Best Paper Award, taking into account that the paper was selected by the Program Committee.

We are also grateful to Ugo Cinelli Sara Ciotti, Sabrina Giampaolletti, Venerino Filosa, Domenico Macari, and all the support staff of the Organizing Committee from the Sapienza University of Rome for helping us organize AmI 2019.

November 2019

Ioannis Chatzigiannakis
Boris De Ruyter
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