

Preface

This volume contains the papers presented at the 2020 edition of AI³, the *Workshop on Advances In Argumentation In Artificial Intelligence*. This year, the workshop was a track of the 19th *International Conference of the Italian Association for Artificial Intelligence (AIxIA2020)*, and, owing to the COVID-19 emergency, was held online on the 25th and 26th of November 2020. This workshop was promoted by the *Argumentation in Artificial Intelligence Working Group*.

Argumentation is the study of processes and activities involving the production and exchange of arguments, where arguments are reasons for accepting or refuting a particular conclusion or claim. As such, argumentation provides procedures for making and explaining decisions and is able to capture diverse kinds of reasoning and dialogue activities in a formal but still intuitive way. Over the last two decades formal argumentation has become a main research topic in Artificial Intelligence. Given that the study of argumentation is inherently interdisciplinary, the goal of the workshop was to stimulate discussions and promote scientific collaboration among scholars from different disciplines, including computer science, philosophy, psychology, and computational linguistics.

AI³ is a traditional occasion of meeting where Italian researchers in the field of argumentation strengthen a group identity and share their interests. Also in this edition, the workshop gathered contributions of researchers from the international community. A wide set of topics were discussed during the workshop, including foundations in argumentation as well as challenges and real-world problems for which argumentation may represent a viable AI-paradigm. Each submission underwent a single-blind peer-review process and each paper was reviewed by at least 3 reviewers. The workshop involved 8 papers accepted for oral presentation, which are collected in this volume, and an invited talk. These papers dealt with various aspects of argumentation, including concurrent languages, approximate reasoning, as well as computational methods and semantic aspects of argumentation.

We would like to express our special thanks to the Program Committee members, the authors and all the attendees.

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