Preface

It is our pleasure to welcome you to the proceedings of the 7th Hellenic Conference on Artificial Intelligence (SETN 2012) held during May 28–31, 2012, in Lamia, Greece. SETN 2012 was organized by the Hellenic AI Society (EETN), in collaboration with the Department of Computer Science and Biomedical Informatics of the University of Central Greece. Previous conferences were held at the University of Piraeus (1996), at the Aristotle University of Thessaloniki (2002), at the University of the Aegean (Samos, 2004, and Syros, 2008), jointly at the Foundation for Research and Technology Hellas (FORTH) and the University of Crete (2006), and at NCSR "Demokritos" (2010).

SETN conferences have already been established as the most prominent forums for Greek and international AI scientists to present original and high-quality research on emergent topics of artificial intelligence. The SETN 2012 conference aimed to:

- Bring together researchers who work actively in the field of artificial intelligence, to support the exchange of opinions and the formation of new research groups and collaborations
- Disseminate original and highly qualitative results of the Greek AI community and Greek research labs, fostering international collaborations
- Inform undergraduate and postgraduate students about the current state of affairs of AI research as conducted by scientists in Greece and worldwide
- Promote research results to companies and facilitate the development of innovative products

The task of the Technical Program Committee was very challenging putting together a program containing 48 high-quality contributions out of 81 submissions. The collection of papers included in the proceedings offer stimulating insights into emerging AI fields and describe advanced methodologies, systems, tools and techniques. The SETN conference series allows and encourages international participation and the language of the conference is English. Thus, this year the conference proceedings include papers from Germany, Belgium, USA and Taiwan.

Five Special Sessions dedicated to specific AI fields were also affiliated within the SETN 2012 conference:

- Advancing Translational Biological Research Through the Incorporation of Artificial Intelligence Methodologies (Aristotelis Chatziioannou, National Hellenic Research Foundation, Anastasios Bezerianos, University of Patras, and Konstantina Nikita, National Technical University of Athens)
- Artificial Intelligence in Bioinformatics (Pantelis Bagos, University of Central Greece)
- Intelligent Annotation of Digital Content (Dimitris K. Iakovidis, Technological Educational Institute of Lamia)

- Affective and Natural Interfaces (George Caridakis, National Technical University of Athens, Kostas Karpouzis, National Technical University of Athens, and Panagiotis Bamidis, Aristotle University of Thessaloniki)
- Unified Multimedia Knowledge Representation and Processing (Evaggelos Spyrou, Technological Educational Institute of Lamia, Manolis Wallace, University of Peloponnese, Phivos Mylonas, Ionian University, and Ioannis Anagnostopoulos, University of Central Greece)

The wide range of topics and high level of contributions guaranteed a very successful conference. We express our special thanks to all who contributed to the organization and scientific content of this conference. First to the authors of the papers, then to the special session organizers and finally to the reviewers and members of the Program and Organizing Committees. Last but not least, we also thank Alfred Hofmann, Frank Holzwarth, Anna Kramer, Christine Reiss, and the rest of the Springer team for their continuous help and support.

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