

Preface

The SETN 2020 Workshops volume is a collection of works that cover a wide spectrum of Artificial Intelligence (AI) applications. These papers have undergone peer reviewing in the corresponding workshops and special events, which complemented the SETN 2020 main conference (<https://setn2020.eetn.gr/>). A number of the workshops brought about research discussions and topics that facilitate novel communities, empowering future research in AI.

We are excited to bring forth the results of these very interesting workshops, outlined below:

- Games and AI: Technological, Cultural and Societal aspects (cf. <https://games-and-ai.scify.org/>). The aim of this workshop is to activate and empower the – already emerging – community of game designers, developers, researchers and players by highlighting the role of AI in this gigantic and important ecosystem. The workshop also reflects the interaction of these disciplines as an integral part of the culture and society, identifying challenges and opportunities in the intersection between all these domains of knowledge. As such, the workshop is an interdisciplinary meeting place of research and innovation related to games and AI.
- AI for Fashion (cf. <http://cdc.ihu.gr/ai4fashion/>). Even though AI has been around for several years now, the technologies that are currently being applied to fashion are still in their early days. The goal of this workshop is to gather people from academia, industry, and startups working at the intersection of fashion and data mining and knowledge discovery, to investigate incorporation of AI technology in the fashion domain. This 1st installment of the workshop can become, in the future, the premier venue for presenting works that are solving problems related to fashion using artificial intelligence, machine learning and data mining.
- AI in Natural Sciences and Technology (cf. <https://ainst.scify.org/>). The intention of this interdisciplinary workshop on AI and natural sciences and technology is to bring together practitioners from both AI and a wide range of scientific and engineering disciplines to cross-fertilize research, algorithms, tools, and novel application areas. To this end, the workshop aims at activating and empowering the – already emerging – community of natural scientists and engineers on the key role of implementing AI to a plethora of cutting-edge scientific domains and industrial processes, as well as AI researchers that understand the idiosyncrasies and challenges of applying AI methods in the area of natural sciences and engineering.
- Artificial Intelligence of Things at the core of Secure, Connected and/or Dependable CPS (cf. <https://sites.google.com/g.upatras.gr/aitcps2020/home>). The application of Artificial Intelligence in IoT and CPS created a new generation of smart devices, more efficient, with augmented capabilities in areas like task optimization, automation and dependability, able to adjust to unknown inputs. These advances have revolutionized a large number of industry sectors such as agri-food, transportation, smart cities, manufacturing and healthcare. The aim of this workshop is to bring together researchers, engineers and practitioners from different fields in industry and academia interested in key areas of Artificial Intelligence of Things in Cyber-Physical Systems. The workshop will provide a platform to share and exchange ideas, research results and experiences in the fields of AIoT and CPS.
- Artificial Intelligence, Ethics and Law (cf. <https://altws.mashup.gr/>). This special event is concerned about the legal implications of developing and using AI systems in practice. In particular, it will focus on a range of legal issues concerning AI, such as explainability, IP rights and liability. Overall, this special event aims at presenting a comprehensive overview of the legal framework on AI as well as potential applications of AI in our legal system.

We strongly believe that the wide variety of contributions in this volume constitutes a body of knowledge that can underline challenges and suggest solutions to empower the corresponding scientific ventures, resulting in wider, more realistic application of AI in the above challenging topics.

We would like to thank all the workshop organizers who made this volume possible, the contributing authors for their interesting work, as well as the participants of the events. We would also like to thank the organizers of SETN 2020, as well as Nikiforos Pittaras and Despoina Chalvatzi who contributed significantly to the coordination and the compilation of the final proceedings.

On behalf of the Editors,
George Giannakopoulos

In memory of Eleni Galiotou