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(Eds.)



**International Workshop of IT-professionals
on Artificial Intelligence**
ProfIT AI 2021

Kharkiv, Ukraine

September 20-21, 2021

International Workshop of IT-professionals on Artificial Intelligence “ProfIT AI 2021”, Kharkiv, Ukraine, September, 20-21, 2021

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Preface

It is our pleasure to present you the proceedings of International Workshop of IT-professionals on Artificial Intelligence (ProfIT AI 2021), Kharkiv, Ukraine, 20-21 September, 2021.

ProfIT AI 2021 is intended to discuss practical aspects of the latest research and results of international scientists and practitioners related to artificial intelligence. Aim of the workshop is to exchange new ideas, obtained theoretical and practical results of scientific research in the field of artificial intelligence, to discuss the current stage of the industry in Ukraine and all around the world, to integrate efforts to introduce research results, the establishment of creative contacts and the expansion of scientific ties. We believe that the workshop results are going to make a significant contribution to the development of artificial intelligence.

The workshop was supported by the largest associations of Ukraine: **Ukrainian Scientific IT Society** and **Kharkiv IT Cluster**.

The workshop is soliciting literature review, survey and research papers including, whilst not limited to, the following areas of interest:

- Machine Learning Applications;
- Natural Language Processing;
- Computer Vision;
- Data Mining;
- Multiagent Systems;
- Intelligent Information and Communication Technologies;
- Intelligent Methods in Healthcare;
- Computational Theory of Mind for Human-Machine Interaction;
- Artificial Intelligence for Human-Robot Interaction;
- Using Artificial Intelligence in Cybersecurity;
- Artificial Intelligence Ethics.

The language of Workshop ProfIT AI 2021 is English. The Symposium took the form of oral presentations of peer-reviewed regular papers.

Submitted papers was peer-reviewed by three reviewers from at least two countries on the basis of technical quality, relevance, originality, significance, and clarity. The Program Committee used reviews to determine which papers could be accepted for presentation at the workshop. 40 papers were received, 16 papers were accepted (**Acceptance rate is 40%**). All accepted papers were presented during the Workshop.

The workshop would not have been possible without the support of many people. First of all, we would like to thank the program and organization staff, the members of the Technical Program Committees and external reviewers for their excellent and tireless work. We sincerely wish that all attendees benefited scientifically from the workshop and wish them every success in their research. It is the humble wish of the workshop organizers that the professional dialogue among the researchers, scientists, engineers and doctors continues beyond the event and that the friendships and collaborations forged will linger and prosper for many years to come.

2021

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