

**UNIVERSITY "ST. KLIMENT OHRIDSKI" - BITOLA
FACULTY OF INFORMATION AND COMMUNICATION
TECHNOLOGIES - BITOLA
REPUBLIC OF NORTH MACEDONIA**

**Proceedings of the 13th International Conference on
Applied Internet and Information Technologies
AIIT 2023**

13 October, 2023, Bitola, Republic of North Macedonia



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Introduction

The International conference on Applied Internet and Information Technologies is a traditional meeting held every year, that sprouts out of collaboration between the University of Novi Sad, Technical Faculty “Mihajlo Pupin”, Zrenjanin, Serbia and the University “St. Kliment Ohridski”, Faculty of Information and Communication Technologies - Bitola, Republic of North Macedonia. The XIII AIIT2023 was held in Bitola, Macedonia on which besides the participants from Serbia and Macedonia there were researchers from Croatia, Bosnia and Herzegovina, Hungary, Finland, Russia, Turkey, Egypt, India and Australia whose contribution was either as authors or as reviewers of the papers.

At the Conference were presented innovative findings in the field of information systems, communications and computer networks, software engineering and applications, data science and big data technologies, artificial intelligence, intelligent systems, business intelligence and IT support to decision-making, data and system security, distributed systems, Internet of Things and smart systems, embedded systems, computer graphics, IT management, e-commerce, e-government, e-education, Internet marketing, and IT practice and experience.

The Conference chairs would like to express gratitude to the authors for their contributions and to express special gratitude to the reviewers for their tremendous work done for selecting the papers with their valuable comments and suggestions that contributed to improve the quality of the papers. Out of more than 60 submitted papers, 51 were selected, presented at the Conference and are published in this proceedings.

The work during the conference was organized in nine sessions: plenary session, five in-person oral sessions, one video session and two poster sessions. During the conference, a round table with participants from academic organizations and IT industry was successfully organized. The theme of the discussions at the round table was "Strengthening the capacities of Faculty of ICT for the realization of strategic cooperation with companies from the IT industry".

AIIT 2023 was very successful conference with fruitful exchange of experiences among the participants reviving the hope of further strengthening a friendly environment after the pandemic crisis. We hope that we will continue with the contribution to the further deepening the development of Internet and information technologies research.

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Kostandina Veljanovska, Ph.D. finished BSc in Computer Science at the University "Sts. Kiril i Metodi", Skopje. Her first MSc in Applied Engineering she received at the University of Toronto, Toronto, Canada. Her second MSc and also her PhD in Technical Sciences she received at the University “St. Kliment Ohridski” - Bitola, R. Macedonia. Her postdoctoral studies in Artificial Intelligence she attended at the Laboratory of Informatics, Robotics and Microelectronics at the University of Montpellier, Montpellier, France. She worked as a Research assistant at the Faculty of Applied Science, University of Toronto, Canada. She also, worked as a researcher in research team for Constraints, Learning and Agents at LIRMM, University of Montpellier. Since 2008, she works as a Full Professor in Information Systems and Networks, Artificial Intelligence and Systems and Data Processing at the Faculty of Information and Communication Technologies, University “St. Kliment Ohridski” - Bitola, Republic of North Macedonia. Her research work is focused on artificial intelligence, machine learning techniques and intelligent systems. She has published numerous scientific papers in the area of interest, as well as several monographic items. She is a reviewing referee for well-known publishing house, journals with significant impact factor in science and also, member of editorial board of several international conferences.

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