

PREFACE



It is our pleasure to present you the proceedings of the 1st International Workshop on Bioinformatics and Applied Information Technologies (BAIT-2024), held in Zboriv, Ukraine, from October 02 to 04, 2024. The workshop is organized on the basis of Zboriv Professional College of Ternopil Ivan Puluj National Technical University with the support of scientists of the Faculty of Computer Information Systems and Software Engineering and the Faculty of Applied Information Technologies and Electrical Engineering (Ternopil Ivan Puluj National Technical University).

Today, there is a rapid development of the IT industry in the direction of solving applied problems regarding the effective organization of the information process to reduce the costs of time, labor, energy and material resources in all areas of human life and modern society, based on the rational use of modern achievements in the field of computer technology and other high technologies, the latest means of communication, software and practical experience. The introduction of concepts and technologies of artificial intelligence, the Internet of Things, big data analysis, cloud technologies, machine learning, etc., is especially fast and effective in order to solve not only specialized technological needs, but also everyday needs of ordinary users. This trend is particularly rapid in the field of biomedical technologies, in particular from the collection, storage, modeling and analysis of biomedical data, signals and images, to the development of complex intellectualized human-machine systems, in particular brain-computer interfaces, intellectualized systems of human empowerment and rehabilitation lost functions, etc. The purpose of BAIT-2024 is to discuss the results of original scientific research in the directions of creating or improving applied information technologies both for the needs of society in general and for the needs of biomedicine in particular.

This workshop provides opportunities to exchange new ideas establish business or research relationships and find global partners for future cooperation. International Program Committee of BAIT-2024 has 23 members. Most of them have more than 10 papers in DBLP. Additionally, specialists from other fields of science were involved, who have a significant number of papers in Scopus and Web of Science. They assessed the applied side of individual peer-reviewed papers that contained practical applications of IT. There are the representatives of 7 Ukrainian Universities and of 7 Universities from around the world (Poland, Slovakia, London, Croatia).

The 1st International Workshop on Bioinformatics and Applied Information Technologies (BAIT-2024) received 30 submissions from representatives of 14 universities from Ukraine and 7 universities from around the world. All papers were evaluated by two or three reviewers. Based on the reviews, a rating of papers was compiled. Papers with a positive average scores were accepted for presentation at the Workshop.

We received papers from scientists from Ukraine, Morocco, Poland, United Kingdom, Slovakia and China. However, not all of these papers have successfully passed peer review. According to the decision of the International Program Committee, 25 papers were accepted for presentation at the workshop.

We would like to thank the members of International Program Committee and Organizing Committee, and external reviewers for their excellent and tireless work. We sincerely wish everyone fruitful work and interesting presentations! We hope that the workshop results make a significant contribution to the development of bioinformatics and intelligent information technologies in Ukraine and the world.

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