

Preface

E S Kozlova^{1,2}

¹Samara National Research University, Moskovskoe Shosse 34, Samara, Russia, 443086

²Image Processing Systems Institute of the RAS - Branch of the Federal Scientific Research Centre "Crystallography and Photonics" of Russian Academy of Sciences, Molodogvardeyskaya str. 151, Samara, Russia, 443001

This volume contains the papers presented at session "Data Science" within the IV International Conference on Information Technology and Nanotechnology (ITNT-2018) which was held in Samara, Russia, April 24–27, 2018 (itnt-conf.org). The Conference is intended to provide a forum for leading scientists from all over the world to discuss the latest advances in the basic and applied research in the field of Information Technology and Nanotechnology, attract young people to advanced scientific research, and share the latest trends in training and research programs for future ITNT specialists [1]. In addition to the session mentioned above, ITNT-2018 also included the following Sections: "Computer Optics and Nanophotonics", "Image Processing and Earth Remote Sensing", "Mathematical Modeling of Physical-Technical Processes and Systems".

The scientific forum in Samara brought together more than 420 scientists from more than 45 cities in Russia, Germany, United Kingdom, Finland, Switzerland, China, India, Pakistan, Iran, Iraq, Belarus, Moldova, Poland and many others. 407 talks enabled discussion on a wide range of topics. The topics of the papers in this volume include data mining, machine learning, security, cryptography, high performance computing.

This year we have received 141 submissions addressed to "Data Science". The Program Committee members and the reviewers carefully reviewed each submission. Based on the reviews, Program Committee accepted 104 papers for presentation at the conference and publication. Program Committee published some of the accepted papers in Journal of Physics: Conference Series, in the volume covering all topics of the Conference. The current volume contains 59 papers not included in the Journal of Physics: Conference Series volume.

I thank all the participants of ITNT-2018 for excellent presentations and discussions.

Conference Organizers

- Samara National Research University, Samara, Russia
- Image Processing Systems Institute of the RAS - Branch of the Federal Scientific Research Centre "Crystallography and Photonics" of Russian Academy of Sciences, Samara, Russia

Program Committee Chair

- Viktor Soifer, Samara National Research University

Organizing Committee Chair

- Evgeniy Shakhmatov, Samara National Research University

Vice-chairs

- Vladimir Bogatyrev, Samara National Research University
- Nikolay Kazanskiy, Image Processing Systems Institute of the RAS
- Eduard Kolomiets, Samara National Research University
- Alexander Kupriyanov, Samara National Research University

Compilers of the volume

- Vladimir Fursov, Samara National Research University

- Michael Sobolewski, Polish-Japanese Institute of IT, Warsaw, Poland
- Egor Goshin, Samara National Research University

Issuing editor

- Denis Kudryashov, Samara National Research University

The conference was held with the financial support of the Russian Foundation for Basic Research and Federal Agency of Scientific Organizations.

Reference

[1] Savelyev D A 2017 *Computer Optics* **41(5)** 775-785 DOI: 10.18287/2412-6179-2017-41-5-775-785