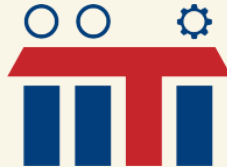




**Rostov State Transport University (Russia)**  
**St. Petersburg Federal Research Center of RAS (Russia)**  
**ITMO University (Russia)**  
**Russian Association for Artificial Intelligence (Russia)**



**7-th International Scientific Conference**



# **Intelligent Information Technologies for Industry**



## **Call for Papers**



**September 25, 2023**



**September 30, 2023**



**St. Petersburg, Russia**

## Dear colleagues!

On behalf of the **IITI** organizers, we have a great pleasure to invite you to take part in the IITI'23 conference, which will be held on September 25-30, 2023 in St. Petersburg. It is the 7th Conference of the series "Intelligent Information Technologies for Industry". It is organized by Rostov State Transport University (Russia) with the support of the Russian Association for Artificial Intelligence. In 2023, the conference is co-organized by St. Petersburg Federal Research Center of RAS and ITMO University.

The purpose of **IITI** is to bring together the international advanced experience in the field of the development and implementation of the modern techniques in automation, digitalization and artificial intelligence in fundamental and applied sciences as well as the development of contacts in this sphere. The innovative intelligent information technologies are of particular interest at the conference.

Annually, **IITI** is held with the participation of leading international scientists. The history of the conference includes multiple international locations, such as Sirius (Russia), VSB-Technical University of Ostrava (Czech Republic), Technical University of Varna (Bulgaria), Istanbul Aydin University (Turkey) etc. Due to IITI, more than 1000 scientists from all over the world published more than 350 scientific papers in IITI Proceedings, which are indexed in Scopus and Web of Science.

The organizing committee of the conference is inviting interested researchers and professionals to submit papers describing significant scientific achievements and innovations in all areas of automation, digitalization and artificial intelligence. All submissions will be thoroughly peer-reviewed by multiple reviewers. Proceedings of IITI'23 conference will be published in [Springer series Lecture Notes in Networks and Systems](#). The publications will also be indexed in SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. In addition, following the examples of the previous conferences, the probability of indexing in the Web of Science is high.

In 2023, the conference includes International Workshop "Application of Mathematical Methods in Artificial Intelligence".

## MAIN TRACK TOPICS

1. Bayesian Networks and Trust Networks, Fuzzy-Stochastic Modelling
2. Fuzzy Models and Systems
3. Non-Classical Logic and Plausible Inference
4. Neural Networks Technologies
5. Evolutional Modeling and Genetic Algorithms
6. Multiagent Systems
7. Decision Making Intelligent Systems
8. Machine Learning and its Applications
9. Automation and Intellectualization for Industrial, Transport and Energetic Systems

10. Intelligent medical systems
11. Flexible models of management over socio-technical systems
12. Explainability and bias in Artificial Intelligence
13. Cyber security in Industry 4.0

In the IITI'23 framework the International Workshop dedicated to application of mathematical methods in artificial intelligence is planned. The workshop will cover artificial intelligence in various areas from oil and gas industry and to information technologies.

## **IMPORTANT DATES**

### **March 6, 2023**

Deadline for application for participation in the conference. To make the submission just fill up the required fields at EasyChair (<https://easychair.org/conferences/?conf=iiti23> marked by “ \* ”, (to apply the participation, file of publication can be initially missed).

### **April 3, 2023**

Deadline for the paper submission (file of publication at [EasyChair page](#) must be uploaded before this date).

### **May 29, 2023**

Acceptance/rejection notification.

### **June 12, 2023**

Camera-ready and registration.

### **September 25-30, 2023**

Conference dates

## **CONFERENCE FEE**

Conference fee is 300 EUR as for the main track, as for the workshop. The payment is required only for accepted papers.

## ORGANIZATION

### Honored Chairs

- **Vladimir Vereskun**, Rostov State Transport University, Russia
- **Vladimir Vasiliev**, ITMO University, Russia
- **Andrey Ronzhin**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Imran Akperov**, Southern University, Russia

### Conference Chairs

- **Igor Kotenko**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, ITMO University, Russia
- **Sergey Kovalev**, Rostov State Transport University, Russia

### Organizing Chairs

- **Alexander Guda**, Rostov State Transport University, Russia
- **Andrey Sukhanov**, Rostov State Transport University, JSC “NIIAS”, Russia
- **Danil Zakoldaev**, ITMO University, Russia

### Organizing Committee

- **Maria Butakova**, Southern Federal University, Russia
- **Anna Kolodenkova**, Samara State Technical University, Russia
- **Maria Koroleva**, Bauman Moscow State University, Russia
- **Dmitriy Levshun**, ITMO University, Russia
- **Ivan Olgeizer**, JSC “NIIAS”, Russia
- **Maria Shutova**, ITMO University
- **Vitezslav Styskala**, VSB-Technical University of Ostrava, Czech Republic

### International Program Committee

- **Maxim Abramov**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Alexey Averkin**, Dorodnicyn Computing Centre of Russian Academy of Sciences, Russia
- **Costin Badica**, University of Craiova, Romania
- **Fubing Bao**, China Jiliang University, China
- **Sebastian Basterrech**, VSB-Technical University of Ostrava, Czech Republic
- **Didier El Baz**, LAAS-CNRS, France
- **Ildar Batyrshin**, National Polytechnic Institute, Mexico
- **Alexey Bobtsov**, ITMO University, Russia
- **Vadim Borisov**, Moscow Power Engineering Institute in Smolensk, Russia
- **Alexander Boukhanovsky**, ITMO University, Russia
- **Alexander Bozhenyuk**, Southern Federal University, Russia
- **Bharat S Chaudhari**, MIT World Peace University, India

- **Andrey Chechulin**, ITMO University, Russia
- **Alexander Degtyarev**, Saint-Petersburg State University, Russia
- **Xiaotie Deng**, Peking University, China
- **Vasily Desnitsky**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Alexander Dolgiy**, JSC "NIIAS", Russia
- **Igor Dolgiy**, Rostov State Transport University, Russia
- **Alexander Eremeev**, Moscow Power Engineering Institute, Russia
- **Elena Fedorchenko**, SPbSUT, Russia
- **Igor Fominykh**, Moscow Power Engineering Institute, Russia
- **Ford Lumban Gaol**, Binus University, Indonesia
- **Xu Genjiu**, Northwestern Polytechnical University, China
- **Leonid Gladkov**, Southern Federal University, Russia
- **Vladimir Gorodetsky**, JSC "Eureca", Russia
- **Valeria Gribova**, Far Eastern Branch of the Russian Academy of the Sciences, Russia
- **Zhichang Guo**, Harbin Institute of Technology, China
- **Gao Hongwei**, Qingdao University, China
- **Mirjana Ivanovic**, University of Novi Sad, Serbia
- **Konstantin Izrailov**, The Bonch-Bruевич Saint-Petersburg state university of telecommunications, Russia
- **Alexey Karpov**, ITMO University, Russia
- **Valery Karpov**, The National Research Centre "Kurchatov Institute", Russia
- **Agop Khatlamadzhiyan**, JSC "NIIAS", Russia
- **Ivan Kholod**, Saint Petersburg Electrotechnical University "LETI", Russia
- **Boris Kobrinskii**, Federal Research Center "Informatics and Management" of the Russian Academy of Sciences, Russia
- **Alexander Kolesnikov**, Immanuel Kant Baltic Federal University, Russia
- **Konstantin Kornienko**, JSC NIIAS, Russia
- **Anatoly Korobeynikov**, IZMI RAS, Russia
- **Viktor Kureichik**, Southern Federal University, Russia
- **Vladimir Kureichik**, Southern Federal University, Russia
- **Oleg Kuznetsov**, Institute of Control Sciences of Russian Academy of Sciences, Russia
- **Sergey Kuznetsov**, Higher School of Economics, Russia
- **Yin Li**, Harbin Institute of Technology, China
- **Wei Lifei**, Shanghai Ocean University, China
- **Guangyu Liu**, Hangzhou Dianzi University, China
- **Qiang Lu**, Hangzhou Dianzi University, China
- **Sergey Makhortov**, Voronezh State Technical University, Russia
- **Muhammad Ary Murti**, Telkom University, Indonesia
- **Evgenia Novikova**, Saint Petersburg Electrotechnical University "LETI",

Russia

- **Aleksandr Panov**, Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences, Moscow Institute of Physics and Technology, Artificial Intelligence Research Institute, Russia
- **Sergey Petrenko** , Innopolis University, Russia
- **Ovanes Petrosian**, Saint-Petersburg State University, Russia
- **Andrei Petrovski**, Robert Gordon University, United Kingdom
- **Wasim Raad**, Istanbul Aydin university, Turkey
- **Yuri Rogozov**, Southern Federal University, Russia
- **Gregory Royzenson**, Institute for Systems Analysis of Russian Academy of Sciences, Russia
- **Igor Saenko**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Ilias Savvas**, University of Thessaly, Greece
- **Giuseppe ML Sarne**, University of Milano Bicocca, Italy
- **Rajeev Shorey**, IIT Delhi, India
- **Petr Skobelev**, Samara Federal Center of Russian Academy of Science & Samara State Technical University, Russia
- **Alexander Smirnov**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Vadim Stefanuk**, Institute for Information Transmission Problems, Russia
- **Maya Sukhanova**, Azov-Black Sea State Engineering Institute, Russia
- **Dapeng Tan**, Zhejiang University of Technology, China
- **Alexander Tselykh**, Southern Federal University, Russia
- **Alexander Tulupyev**, Saint-Petersburg Federal Research Center of Russian Academy of Sciences, Russia
- **Lev Utkin**, Peter the Great St Petersburg Polytechnic University, Russia
- **Dmtry Vinogradov**, Federal Research Center "Informatics and Management" of the Russian Academy of Sciences, Russia
- **Jian Wang**, Hangzhou Dianzi University, Hangzhou, China
- **Wang Wenfa**, Yan'an University, China
- **Nadezhda Yarushkina**, Ulyanovsk State Technical University, Russia
- **Dmitry Yudin**, Moscow Institute of Physics and Technology, Artificial Intelligence Research Institute, Russia
- **Mikhail Zabezhailo**, Dorodnicyn Computing Centre of Russian Academy of Sciences, Russia
- **Dazhi Zhang**, Harbin Institute of Technology, China



## KEYNOTE SPEAKERS

- **Rajeev Shorey, IIT Delhi, India**
- **Vladimir Gorodetsky, JSC Eureka, Russia**
- **Alexey Karpov, ITMO University, Russia**
- **Lev Utkin, Peter the Great St. Petersburg Polytechnic University, Russia**
- **Petr Skobelev, Samara Federal Center of Russian Academy of Science & Samara State Technical University, Russia**

## INTERNATIONAL WORKSHOP

### "Application of Mathematical Methods in Artificial Intelligence"

The conference will host a workshop devoted to the Application of Mathematical Methods in Artificial Intelligence in industry ranging from the oil and gas industry to information technology. The explosion of data and computational power has been a key determinant in the development of Artificial Intelligence (AI), including machine learning and, especially, deep learning, in recent years. AI methods have become increasingly popular as a methodological tool to understand complex data and offer intelligent processing to help people to save time and effort. The topic of this Special Issue is very wide and covers the new fundamental methods in artificial intelligence and related fields, as well as the various applications of artificial intelligence to the different applied areas in industry ranging from the oil and gas industry to information technology. Topics of interest include but are not limited to: Machine learning theory and applications; Deep learning and applications; Explainable AI; Data mining approaches; Knowledge-based systems; Expert system ; Multi-agent technologies.

The proceedings of the workshop will be included into the IITI'23 proceedings.

### Workshop Chairs

- **Ovannes Petrosyan, St. Petersburg State University, Russia**
- **Li Yin, Harbin Polytechnic University, China**

### Workshop Program Committee

- **Konstantin Amelin, St. Petersburg State University, Russia**
- **Zhang Dazhi, Harbin Polytechnic University, China**
- **Alexander Degtyarev, St. Petersburg State University, Russia**
- **Xu Genju, Northwestern Polytechnic University, China**
- **Anna Golovkina, St. Petersburg State University, Russia**
- **Oleg Granichin, St. Petersburg State University, Russia**
- **Gao Hongwei, Qingdao University, China**
- **Igor Ignatovich, St. Petersburg State University, Russia**
- **Wang Jian, Hangzhou Dianzi University, China**
- **Vladimir Korkhov, St. Petersburg State University, Russia**

- **Wei Laifei**, Shanghai Ocean University
- **Wang Wenfa**, Yan'an University, China
- **Deng Xiaote**, Peking University, China
- **Guo Zhichang**, Harbin Polytechnic University, China

## VENUE

ITMO University.

## PAPER SUBMISSION

Papers reporting original and unpublished research results on the above and related topics are solicited. All submitted papers will be refereed for quality, originality and relevance by the Program Committee. The acceptance/rejection of the papers will be based on the review results. All questions should be addressed to contact e-mail. An electronic version (PDF format) of the full paper should be submitted by the paper submission deadline to the conference website. Manuscripts should be provided according to the guidelines given at the following link where you can find the necessary styles and information:

<https://www.springer.com/series/15179>

(If this link does not work for you, go to <http://www.springer.com>, search for series "Lecture Notes in Networks and Systems" and follow the link "Instructions for Authors" to the right).

Authors guidelines, LaTeX and Word templates can be downloaded also from [here](#).

The papers will be published as an edited volume in Springer series entitled "Lecture Notes in Networks and Systems".

Only submissions in English language will be considered. The maximum number of pages is 10.

Please, use the following link to submit your paper:

<https://easychair.org/conferences/?conf=iiti23>

Further information is available on the conference website: [iiti.rgups.ru/en/](http://iiti.rgups.ru/en/)

## IITI CONTACTS

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