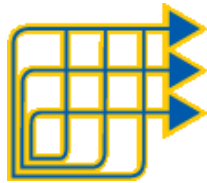


«Theoretical and Applied Aspects of Cybernetics» 23-27 November 2015, Kyiv, Ukraine V International Scientific Conference of Students and Young Scientists

Taras Shevchenko National University of Kyiv
V.M. Glushkov Institute of Cybernetics of NAS of Ukraine
Institute of Software Systems of NAS of Ukraine
Scientific Community of Students and Postgraduates of Cybernetics Faculty
International Scientific Society ITHEA



Invite you to take part in
V International Scientific Conference of Students and Young Scientists

«Theoretical and Applied Aspects of Cybernetics»

This event will be held **from 23 to 27 November 2015** in Kyiv. It will be based on Cybernetics Faculty of Taras Shevchenko National University of Kyiv.

In addition to plenary sessions, you have an opportunity to visit theme parties, take some excursions around Kyiv, find new friends and like-minded people, fill positive emotions and have a good time.

Papers of the conference will be published on conference's website and in the proceedings, printed copy of which will be presented to every participant. The cost of the proceedings is included into the registration fee.

Organizational issues:

- Registration and paper submission deadline: **18.10.2015**.
- The official languages of the conference: Ukrainian, English, Russian.
- **Only articles written in English will be accepted.**
- All papers will be processed by the program committee of the conference. Authors of works, that successfully passed the reviewing, will receive an invitation to the conference.
- The meeting will be held in the format of reports. 20 minutes are given for report, including 10 minutes for discussion.
- Roundtables will be organized for additional discussion of topical issues of cybernetics and the most interesting reports.
- You should fill the registration form in «Registration» section on the conference web site <http://taac.org.ua/reg.htm>.
- Registration fee is:

Category of participants	Early registration (until 01.09.2015)	Late registration (after 01.09.2015)
Students from Ukraine	200 UAH	250 UAH
Students from other countries	40 EUR	50 EUR
Ph.D. Students and Young Scientists from Ukraine	300 UAH	350 UAH
Ph.D. Students and Young Scientists from other countries	50 EUR	60 EUR

- From 23 to 27 November, when participants will be in Kyiv, they will be provided with a residence. Approximate price is 250 UAH (10 €) per day (paid separately from registration fee). If it is necessary there will be an opportunity to stay for additional time in the hostel (250 UAH (10 €) per day).

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Scope of the conference:

1. Computer Science:

- 1.1 Bioinformatics.
- 1.2 Information Security and Cryptography.
- 1.3 Databases and Knowledge Bases.
- 1.4 Algorithms and Data Structures.
- 1.5 Evolutionary Algorithms.
- 1.6 Mathematical Logic.
- 1.7 Theory of Sets and Multisets.
- 1.8 Theory of Fuzzy and Rough Sets.
- 1.9 Automata Theory and Formal Languages.
- 1.10 Graph Theory.
- 1.11 Petri Nets.
- 1.12 Transition Systems.
- 1.13 Applications of General Algebra.
- 1.14 Computational Complexity Theory.
- 1.15 Constraints Programming.
- 1.16 Automated Theorem Proving.
- 1.17 Model Checking.
- 1.18 Analysis and Verification of Software.
- 1.19 etc.

2. Applied Mathematics:

- 2.1 Applied Mathematical Modeling.
- 2.2 Mathematical Modeling of Social, Ecological, and Economic Processes.
- 2.3 Computational Geometry.
- 2.4 Fractal Analysis and Dynamic Chaos.
- 2.5 Signal and Image Processing.
- 2.6 Theory and Methods of Optimization.
- 2.7 System Analysis and Decision Making.
- 2.8 Game Theory.
- 2.9 Systems with Distributed Parameters.
- 2.10 Differential and Integral Equations.
- 2.11 Numerical Methods.
- 2.12 Combinatorial Analysis.
- 2.13 Data Mining.
- 2.14 Nonlinear Analysis.
- 2.15 Mathematical Statistics.
- 2.16 Random Processes and Stochastic Systems.
- 2.17 Queuing Theory.
- 2.18 Actuarial Mathematics.
- 2.19 Financial Mathematics.
- 2.20 Algebra and Topology.
- 2.21 Categorical Analysis.
- 2.22 Applied Functional Analysis.
- 2.23 Optimal Control.
- 2.24 etc.

3. Artificial Intelligence:

- 3.1 Machine Learning.
- 3.2 Natural language processing.
- 3.3 Machine Translation.

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- 3.4 Planning and Scheduling.
- 3.5 Robotics.
- 3.6 Knowledge Representation and Reasoning.
- 3.7 Intelligent Information Systems.
- 3.8 Intelligent Agents and Networks.
- 3.9 Pattern Recognition.
- 3.10 Knowledge Representation and Reasoning.
- 3.11 Intelligent Information Processing.
- 3.12 Cognitive Modeling.
- 3.13 Computer Vision.
- 3.14 Information Retrieval.
- 3.15 Soft Computing.
- 3.16 Expert Systems.
- 3.17 Neural Networks.
- 3.18 etc.

4. Software Engineering:

- 4.1 Software Development Methodologies.
- 4.2 Software Testing.
- 4.3 Programming Mobile Devices.
- 4.4 Parallel, Distributed and Cloud Computing.
- 4.5 Design and Development of Real-Time Systems.
- 4.6 Software Development Technologies.
- 4.7 Information Systems Development Technologies.
- 4.8 Software Project Management Methodologies.
- 4.9 Reengineering of Software.
- 4.10 Computer Networks and Systems.
- 4.11 Approaches to Quality Assessment and Reliability of Software.
- 4.12 etc.

In addition to meeting sessions, the scientific program of the conference will also include a series of roundtables and lectures, in particular:

- **Arithmetic Operations in Lattice-based Cryptography** — Assistant Professor Sedat Akleylek (Faculty of Engineering, Ondokuz Mayıs University, Samsun, Turkey).

The most recent information on the scientific program can be found on the conference website: <http://taac.org.ua/en/programmeLectures.htm>

Visit conference web site: <http://taac.org.ua> for more information.

You can communicate with organizing committee by e-mail: conf@taac.org.ua

We are looking forward to meeting you at the conference!

Best regards, Organizing Committee.