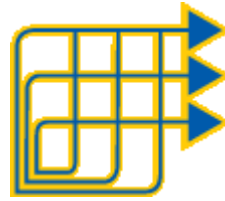
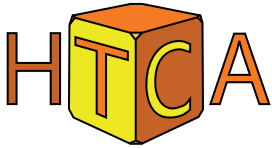


«Theoretical and Applied Aspects of Cybernetics» 12-16 November 2012, Kiev, Ukraine
International Scientific Conference of Students and Young Scientists

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



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

«Theoretical and Applied Aspects of Cybernetics»

This event will be held from **12 to 16 November, 2012** in Kiev. It will be based on Cybernetics Faculty of Taras Shevchenko National University of Kyiv.

This conference is dedicated to the memory of Victor Glushkov. He was the founder of Institute of Cybernetics NAS of Ukraine, the founder of Cybernetics Faculty in Taras Shevchenko National University of Kyiv and academician of the USSR.

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

Papers of the conference will be published on conference's web-site and in form of booklet, printed copy of which will be presented to every participant. The cost of the booklet is included into the participation fee.

Organizational issues:

- Registration and paper submission deadline: **14.10.2012**.
- The official languages of conference: Ukrainian, English, Russian.
- All papers will be processed by the organizing committee of the conference. Authors of works that passed their review will receive an invitation to the conference.
- The meeting will be held in the format of reports. 20 minutes is given for report, 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:
 - **200 UAH** —for participants form Ukraine;
 - **50 €** — for foreign participants.

(Some changes are possible. Check the information on web site.).

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- From 12 to 16 November, when participants will be in Kiev, they will be provided with a residence. Approximate price is 120 UAH (12 €) per day (paid separately from registration fee). If it's necessary there will be an opportunity to stay for additional time in the hostel (120 UAH (12 €) per day).

The scientific program of the conference includes the main directions of cybernetics, which are presented in the following directions:

1. Computer Science:

- 1.1 Bioinformatics;
- 1.2 Information security and cryptography;
- 1.3 Database and Knowledge Base;
- 1.4 Analysis of Algorithms;
- 1.5 Data Structures;
- 1.6 Genetic algorithms;
- 1.7 Mathematical Logic;
- 1.8 Fuzzy sets and Rough sets;
- 1.9 Automata Theory and Formal Languages;
- 1.10 Graph Theory;
- 1.11 Petri nets;
- 1.12 Applications of General Algebra;
- 1.13 Constraints Programming;
- 1.14 Automated Theorem Proving;
- 1.15 Model checking;
- 1.16 Analysis and Verification of Software;
- 1.17 etc.

2. Applied Mathematics and System Analysis:

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

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- 2.24 Optimal Control;
- 2.25 etc.

3. Artificial Intelligence:

- 3.1 Machine Learning;
- 3.2 Computer Linguistics;
- 3.3 Machine Translation;
- 3.4 Robotics;
- 3.5 Intelligent Information Systems;
- 3.6 Intelligent Agents and Networks;
- 3.7 Pattern Recognition;
- 3.8 Adaptive Systems;
- 3.9 Intelligent Information Processing;
- 3.10 Cognitive Modeling;
- 3.11 Computer Vision;
- 3.12 Information Retrieval;
- 3.13 Expert Systems;
- 3.14 Neural Networks;
- 3.15 etc.

4. Software Engineering:

- 4.1 Engineering Software;
- 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 Methodology;
- 4.9 Reengineering Software;
- 4.10 Computer Networks and Systems;
- 4.11 Approaches to quality assessment and reliability software;
- 4.12 etc.

Sponsors and partners of the conference:



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

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

We will be happy to meet you at the conference!

Best regards, Organizing Committee.