Voronezh State University

Research production enterprise Relax

Ltd «Atos IT Solutions and Services»

DataArt Voronezh

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INFORMATION LETTER

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announce 12-13 February 2015

XV International Conference

«Computer Science: problems, methodology, technologies» (IPMT-2015)

and

VI school–conference on

«Computer Science For Education» (INED-2015)

The conference is awaiting submissions of teachers, researches, education authorities specialists, higher and secondary educational institutions leaders.

Within the conference the following sections are planned:

1. Computer Science problems: programming, algorithms (Head of Section – M.A. Artyomov).

Algorithms, compiler development, functional programming.

2. Computer Modelling in fundamental and applied researches (Head of Section – M.G. Semyonov).

Modern technologies and ways of computer simulations.
Algorithmic and software solutions in computer simulations.
Development and Research using computer modelling.
Computer Modelling in system studies.

3. Technologies of data processing and protection (Head of Section – A.A. Sirota).

Image recognition, data and process analysis.
Machine learning.
Image processing and analysis.

Neural network technologies of data processing.
Information Security and Data Protection.
Steganography and Digital Watermarking.
Intelligent systems in Information Security.

4. Information Systems and Databases (Head of Section – A.P. Tolstobrov).

Databases theory, data models, ensuring the Database integrity, Database Management Systems, languages for describing and manipulating data, Corporate Information Systems with Databases, Internet and databases, Distributed and Object-Oriented Databases.

5. Applied modelling and E-business (Head of Section – M.G. Matveev).

Mathematical modelling of technical and socio-economic facilities, forecasting, management and decision-making models under uncertainty.
Structural modelling and business-process analysis, business process management, information technologies of network planning and resource allocation, risk management, e-commerce.

6. Geographic information systems (Head of Section – N.A. Tyukachev).

Analysis and graphical visualisation of spatial data and related to the site information.
Development of Geographic Information Systems.
Techniques of computational geometry.
Search, analysis and editing of digital maps and additional information about facilities.

7. Intelligent information systems (Head of Section – V.V. Garshina)

Software, linguistic and mathematical logic complexes to assist human activity and information retrieval at an advanced interaction mode in natural language.

8. Distributed computing (Head of Section – S.D. Kurgalin).

Distributed computing technologies and distributed processing, GRID-technologies.
Internet projects on distributed processing and parallel computing, computational services.
Theory and implementation of great challenges in Distributed Computing Systems and on supercomputers.
Technologies and Systems of distributed data storage.
Promising models, languages and technologies of parallel programming.
Software environment, tools and resources for development, optimization and debugging parallel applications.
Performance and scalability of parallel applications and computer systems.
Programming technologies on multi-core processors, experiences of applying them into computing.
Parallel computing and visualization.
Supercomputer technologies and data protection.
High performance computing using accelerators and computers with non-traditional architecture.
Parallel computing and education.\

9. Search methodologies (Head of Section – A.V. Sychev).

Heuristic search, blind search, uniform cost search method, state space search etc.

10. Computational linguistics (Head of Section – A.A. Kretov).

AI system development, mathematical models for description of natural languages.
Natural languages processing.

Applied technologies for description and processing language for computer systems. Algorithm and application development for processing linguistic information.

11. Quantum information systems, quantum algorithms, quantum cryptography (Head of Section – S.A.Zapryagaev).
12. CAD and digital technologies (Head of Section – M.I.Chizhov).

Documentation automatization, Information Support and automated decision-making process, concurrent engineering theory, standardization of solutions and processes, strategic design, practical tests replacement and mathematical modelling prototyping, version design method and optimization.

Principals of high and secondary educational institutions, lecturers and instructors of corporate education programs and training centers are called for participation in IX School-Conference "Informatics in education".

Following are the main areas of School-Conference:

1. Teaching techniques of Informatics
2. Mathematics Unified State Exam
3. Project technology of education based on ICT
4. Computerized modelling and EdTech
5. Technologies of information search in the Internet
6. E-learning resources development and utilization
7. Utilization of information technologies for teaching educational disciplines
8. Problematics of distance learning
9. Software for educational institutions
10. Corporate Learning Centers: problematics and perspectives
11. Implementation of professional standards: IT competence requirements

The following is planned within the conference and the school-conference course of work:

- Presentations of the largest local IT-businesses' spokesmen;
- Demonstration of VSU education portal;
- Reports of VSU's and Computer Science Faculty's premier lecturers
- Members of substantive commission of Informatics Unified State Exam reports;
- Meeting the new education fields for bachelors and masters, top-rated IT-companies' learning centers

Conference working languages are Russian, English.

To participate in the conference or the school-conference it is required to register your report on http://ipmt-conf.ru in the register section (please specify the report name, its authors and abstract) **before January 12, 2015**.

Furthermore, for participation in the conference1 it is required to send original expert analysis accepting the possibility of publication at the address 1, Universitetskaya square, Voronezh 394018, Russia, Voronezh State University (VSU), Computer Science Faculty (marked **Conference – Informatics (ipmt 2015)) before January 12, 2015**.

Contents of the report (in Russian or English) and a scan of the expert analysis accepting the possibility of publication should be uploaded to the conference web-site up to **January 24, 2015** in personal account section. The contents should be formatted within the requirements mentioned in the append.

All the reports presented will be peer-reviewed. Reports accepted for participation will be

included in conference proceedings collection.

The formal opening of the conference and the school-conference will take place on *February 12, 2015 at 10.00 a.m.* in the conference hall of main VSU building. Participants should register before beginning of the conference on February 12, 2015. By the beginning of the conference it is intended to publish proceedings collection. After pre-registration contents of the reports (up to 5 pages) should be uploaded to the conference web-site in reports section.

Filename should include: **section number, author's last name (the first co-author) with initials, name of the report**. Example: 6. Ivanov A.A. Study of the river flow characteristics in unsteady conditions.doc. Filename for school-conference "Informatics in education" should look like: **School, author's last name (the first co-author) with initials, name of the report**.

Steering committee reserves the right to decide how report format should look like. Requirements to the appearance of reports are attached.

Deadline for submission which ensures publication of the report is January 24, 2015.

Participants bear all the expenses connected with accommodation, transportation and cost of meals on their own or with the help of sending organization.

Additional information can be got on http://confer-ipmt.ru. In order to get information about conference timely, we recommend subscribe to the mailing: https://groups.google.com/a/sc.vsu.ru/forum/?fromgroups%23!forum/confer-group#!forum/confer-group

Participation and publication of scientific reports is charge-free.

Proceedings collection will be published in the National Electronic Library. For defining Russian Science Citation Index ISBN is assigned.

Requirements for registration

Reports should be written in **Microsoft Word 2003/2007/2010 text editor** (file extension rtf. or doc). **A5** Size. Margins: top - 20 mm; bottom - 20 mm; left - 20 mm; right - 20 mm. Title font size for tables – 12 pt (bold). Main text size – 10 pt. Line spacing – 1. Font - Times New Roman. Indent – 1 cm, alignment on the page width.

Formulas should be drafted in the Microsoft Equation 3.0 formula editor; one-line formulas only. Drawn formulas are unacceptable. Formulas should be numbered in parentheses, citing sources in square brackets. The size of the symbols in the formula should be 10 pt. the size of the main text, a large index - 8 pt., a small index - 4 pt., a large symbol - 15 pt., a small symbol - 10 pt.; font - Times New Roman, form of type: variable - oblique,

matrix-vector - bold, Greek font — Symbol, plain type (non-italic). For special characters in the text use Equation (do not use copy paste). The basic formulas should be placed using tabulation: tab stop position for formulas – center 5.4 cm, tab stop position for the numbering – right 10.8 cm.

Images should be in JPEG or TIFF format with a resolution of at least 300 dpi. Illustrations should only be black and white and its width should not exceed 10 cm. Images and tables should have numbers and names, which must be listed under them. Tables and images should be numbered sequentially. For example: Figure 1. Birth rate; Table 1. Basic network parameters, etc. If there is a picture or a table in the main text in a single copy it shouldn't be numbered. For example: Figure. Birth rate; Table. Basic network parameters.

The drawings created in the Word editor must be inserted as an object (Insert, Object, Microsoft Word drawing).

The title of the report indicates the topic of the paper (text alignment: center). The next line indicates the author or authors (surname, initials) (e-mail) (text alignment: center). Further down the line – organization (text alignment: center). Non-breaking space. The text of the report (text alignment - width).

Since many authors copy parts of the text from their works or from the Internet, in which a large number of their styles are used, it is important to clear all text formatting. On the Home tab, in the Font group, click Clear Formatting.

The volume of the report should not exceed 5 pages. The text is allowed to use no more than 4 styles (normal font, signatures under graphic material, bulleted and numbered list). Report language should be Russian or English.

Example:

Title of the report

Petrov A.V. e-mail: turient@main.vsu.ru
Voronezh State University

List of references in accordance with GOST 7.1-2003 and rules [1], [2].

Bibliography

1. Kovalev, AM Rules for the design of scientific reports / AM Kovalev. - M.: Publisher VVV, 1999. – 167 p.
2. Shattok, M. Dearing on governance – the wrong prescription / M. Shattok // Higner education quart. – Oxford : N.Y., 1998. – Vol. 52. – N. 2. – P. 35-47.