



**APPLICATION
of INFORMATION
and COMMUNICATION
TECHNOLOGIES - AICT2015**

9th International Conference on

**APPLICATION of INFORMATION and
COMMUNICATION TECHNOLOGIES**

CONFERENCE PROGRAM

14-16 October 2015, Rostov-on-Don, Russia

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Samir Rustamov,	<i>National Science Academy, Azerbaijan</i>

PROGRAM AT A GLANCE

14 October 2015

Location: SOUTHERN FEDERAL UNIVERSITY (SFedU)

Main Building

Address: Sadovaya str., 105/42, Rostov-on-Don

08:30 – 13:00 Events at the Main Building (SFedU)

08:30 – 10:00 Registration

10:00 – 10:30 Welcoming and Opening Ceremony

10:30 – 11:30 Keynote Session

11:30 – 12:00 Coffee Break

12:00 – 13:00 Keynote Session (continue)

13:00 – 13:10 Group photo of all participants (location: TBD)

14 October 2015 – AFTERNOON

Location: Faculty of Physics

Address: Zorge str, 5, Rostov-on-Don

13:10 – Transportation to Faculty of Physics (Departure from Main building of SFedU)

13:30 – 14:30 Lunch

14:30 – 15:30 Tutorial Session

15:30 – 16:00 Coffee Break

16:00 – 17:00 Tutorial Session

17:00 – Sightseeing Tour

15 October 2015

Location: ENGINEERING and TECHNOLOGY ACADEMY

Address: Nekrasova alley, 44, building "D", Taganrog

08:00 – Transportation to Taganrog – about 1.5 hours (Departure from Main building of SFedU - Sadovaya str., 105/42 and Marins Park Hotel)

10:00 – 11:00 Keynote Mini Session

11:00 – 11:20 Coffee Break

11:20 – 14:20 Technical Sessions

14:20 – 15:00 Lunch

15:00 – 17:30 City Sightseeing Tour – Taganrog (invitation will be provided during registration)

17:30 – 20:00 Banquet Dinner (invitation will be provided during registration)

20:00 – Transportation to Rostov-on-Don

16 October 2015

Location: SOUTHERN FEDERAL UNIVERSITY (SFedU)

Main Building

Address: Sadovaya str., 105/42, Rostov-on-Don

10:00 – 11:40	Concurrent Technical Sessions
11:40 – 12:00	Coffee Break
12:00 – 13:00	Concurrent Technical Sessions
13:00 – 14:00	Lunch
14:00 – 14:30	SFedU Walking Tour
14:30 – 15:00	Closing Ceremony

AICT2015 International Conference



OCTOBER, 2015

Locations:
SOUTHERN FEDERAL UNIVERSITY (SFedU)
FACULTY OF PHYSICS

14 October 2015

Location: SOUTHERN FEDERAL UNIVERSITY (SFedU)

Main Building

Address: Sadovaya str., 105/42, Rostov-on-Don

10:00–10:30
Hall: Main

WELCOMING AND OPENING CEREMONY

Professor Marina Borovskaya,

Rector of Southern Federal University, Russia

Professor Ahmet Sanich,

Qafqaz University Rector, Azerbaijan

Assoc.Prof. Abzetdin Adamov,

AICT2014 General Chair, Azerbaijan

Representative of Rostov oblast government,

TBD

Professor Esref Adali,

Founding Dean, Istanbul Technical University Turkey

Dr. Gennady Smorodin,

EMC Corporation, Russia

10:30–11:30
Hall: Main

KEYNOTE SESSION

10:30-11:00

Speaker: Professor Victor Kureichik

*Computer Sciences and Information Safety Institute,
Southern Federal University, Russia*

Title: Overview and problem state of ontology models
development.

11:00-11:30

Speaker: Professor Eshref Adali

*Computer Engineering and Informatics Faculty,
Istanbul Technical University, Turkey*

Title: Machine Translation.

11:30–12:00

Coffee Break

12:00–13:00

Keynote Session (continue):

12:00-12:30

Speaker: Professor Valery Tarassov

Bauman Moscow State Technical University, Russia

Title: Knowledge Management and Ontological Modeling in
Enterprise Engineering

12:30-13:00 *Speaker:* **Dr. Evgeniy Pavlovskiy**
Novosibirsk State University, Russia
Title: Developing educational project-oriented Big Data Analytics programs based on business experience

13:00–13:10 **Group photo (location: TBD)**

13:10 – **Transportation to Faculty of Physics** (Departure from Main building of SFedU)

AFTERNOON – 14 October 2015

Location: SOUTHERN FEDERAL UNIVERSITY (SFedU)

Faculty of Physics

Address: Zorge str, 5, Rostov-on-Don

13:30–14:30 **Lunch**

14:30–15:30
Hall: Main **TUTORIAL SESSION**

Speaker: **Professor Valery Sklyarov, Dr. Iouliia Skliarova**
University of Aveiro / IEETA, Portugal
Title: On-Chip Hardware Accelerators for Data Processing and Combinatorial Search

15:30–16:00 **Coffee Break**

16:00–17:00
Hall: Main **TUTORIAL SESSION**

Speaker: **Professor Victor Abrukov**
Department of Applied Physics and Nanotechnology, Chuvash State University, Russia
Title: Information approach to analysis and modeling of experimental data. Qualitative, quantitative and numerical data models.

AICT2015 International Conference



OCTOBER, 2015

Locations:

**ENGINEERING AND TECHNOLOGY ACADEMY
Taganrog Campus of SFedU**

15 October 2015

**Location: ENGINEERING AND TECHNOLOGY ACADEMY
Building "D"**

Address: Nekrasova alley, 44, Taganrog city

08:00 –

Transportation to Taganrog – about 1.5 hours (Departure from Main building of SFedU - Sadovaya str., 105/42 and Marins Park Hotel)

10:00–10:30

KEYNOTE MINI SESSION

**Hall AC
(Academic
Council)**

Speaker: Dr. Vyacheslav Pshihopov

*Vice-principal of the Engineering and Technology
Academy at the SFedU*

Title: The research and development activities in the field of informational systems and technologies at the SFedU.

10:30–11:00

KEYNOTE MINI SESSION

**Hall AC
(Academic
Council)**

Speaker: Dr. Gennadiy Veselov

*Director of the Institute of Computer Technologies
and Informational Security at the SFedU*

Title: The training of specialists in computer technology and information security fields at the SFedU.

11:00–11:20

Coffee Break

11:20–14:20

CONCURRENT TECHNICAL SESSIONS

SESSION 1
BIG DATA MANAGEMENT AND APPLICATION

Session Co-Chairs:

Time: 11:20–14:20

Hall: A

14:20–15:00 Lunch

1. MIPr a Framework for Distributed Image Processing Using Hadoop
by Andrey Sozykin, Timofei Epanchintsev, Ural Federal University, Russia..

2. Big Data as the Big Game Changer
by Gennady Smorodin, EMC Academic Alliance Russia & CIS, Russia; Olga Kolesnichenko, Security Analysis Bulletin, Russia.

3. Analysis of finite fluctuations for solving big data management problems
by Semen L. Blyumin, Galina S. Borovkova, Kseniya V. Serova, Anton S. Sysoev, Lipetsk State Technical University, Russia.

4. Distributed Storage System For Imagery Data In Online Social Networks
by Kokoulin Andrey, Dadenkov Sergey, Perm National Research Polytechnic University, Russia.

5. The technology of data mining civil infrastructure
by Alexandra A. Golubeva, Yury B. Gritsenko, Oleg I. Zhukovsky, Tomsk State University of Control Systems and Radioelectronics, Russia.

6. Information system of efficient data management of groundwater monitoring the Republic of Kazakhstan
by Erken Turganbaev, Zhanar Beldeubayeva, Saule Rakhmetullina, Vladimir Krivykh, EKSTU after D.Serikbaev, Kazakhstan.

7. Running Genetic Algorithms on Hadoop for Solving High Dimensional Optimization Problems
by Güngör Yildirim, Ibrahim R. Hallac, Galip Aydin, Yetkin Tatar, Firat University, Turkey.

8. About Statistical Analysis Methods of Large-Scale Data
by Makrufa S. Hajirahimova, Aybeniz S. Aliyeva, Institute of Information Technology of ANAS, Azerbaijan.

9. Text Analysis Case Study: Determining Word Frequency based on Azerbaijan top 500 websites
by Abzetdin Adamov, Qafqaz University, Azerbaijan.

10. Knowledge-Based System is a Goal and a Tool for Basic and Applied Research

by Victor Abrukov, Valery Kochakov, Alexander Smirnov, Sergey Abrukov, Darya Anufrieva, Chuvash State University, Russia.

11. New Computational Models for Big Data and Optimization

by Sergey Rodzin, Olga Rodzina, Southern Federal University, Russia.

12. Information and Knowledge Integration Based on Simulation Modeling

by YU.A. Kravchenko, VI.VI. Kureichik, D.YU. Zaporozhets, D.V. Zaruba, Southern Federal University, Russia.

13. A Monitoring System to Prepare Machine Learning Data Sets for Earthquake Prediction Based on Seismic-Acoustic Signals

by Alper Vahaplar, Resmiye Nasiboglu, Barish Tekin Tezel, Efendi Nasibov, Dokuz Eylul University, Turkey.

14. Translation of natural language queries to structured data sources

by Ruslan Posevkin, Igor Bessmertny, ITMO University, Russia.

SESSION 2.1
DATA MINING AND DATA ENGINEERING

Session Co-Chairs:

Time: 11:20–14:20

Hall: B

14:20–15:00 Lunch

- 1. A Multi-modal Perturbation-based Selective Ensemble Algorithm**
by Youqiang Zhang, Feng Jiang, Junwei Du, Guozhu Liu, Qingdao University of Science and Technology, China.

- 2. Domain ontology development for linguistic purposes**
by Semenova A.V., Kureychik V.M., South federal University, Russia.

- 3. Cognitive Measurements for New Generation Knowledge Acquisition Systems**
by Valery B. Tarassov, Maria N.Svyatkina, Bauman Moscow State Technical University, Russia; Baurzhan S. Karabekov, Ministry of Education and Sciences of Kazakhstan, Kazakhstan.

- 4. Extracting Phrase-Content Pairs For Turkish Sentences**
by İlknur Dönmez, Eşref Adalı, Istanbul Technical University, Turkey.

- 5. Add-Remove-Confirm: Crowdsourcing Synset Cleansing**
by Dmitry Ustalov, Yuri Kiselev, Ural Federal University, Russia.

- 6. Integration of ontologies in scope of model and conceptual semantics: modified approach**
by V. V. Bova, V. V. Kureichik, A. A. Lezhebokov, Southern Federal University, Russia.

- 7. The Extended Longest Common Substring Algorithm for Spoken Document Retrieval**
by Dmitriy Prozorov, Alexandra Yashina, Vyatka State University, Russia.

- 8. Visual Representation of the Workflows by Using Sugiyama Algorithm**
by Huzeyfe Esen, İdea Teknoloji Çözümleri, Turkey.

- 9. Comparative analysis of classification algorithms**
by R. Muhamedyev, K. Yakunin, S. Sainova, A.Abdilmanova, IITU, Kazakhstan; Y. Kuchin, “GeoTechnoServiss”, Kazakhstan.

- 10. Intelligent learning environments for corporations**
by A.N. Afanasyev, N.N. Voit, Ulyanovsk State Technical University, Russia.

11. A New Approach by Using Tabu Search and Genetic Algorithms in Software Cost Estimation

by Farhad Soleimanian, Hacettepe University, Turkey; Raheleh Rezaii, Bahman Arasteh, Islamic Azad University, Iran.

12. Processing of fuzzy graphic images in intelligent computer vision systems on railway transport

by Dolgiy Alexander, Sergey Kovalyev, Vladimir Samsonov, Agop Khatlamadzhian, Rostov State Transport University, Russia.

13. Argumentation in Inductive Concept Formation

by Vadim Vagin, Marina Fomina, Oleg Morosin, National Research University MPEI, Russia.

14. An Automation of the Course Design with use of Learning Objects with use of the Bloom taxonomy

by Maria Karpova, Vadim Shmelev, Alexey Dukhanov, ITMO University, Russia.

**SESSION 3
CYBER SECURITY ISSUES**

Session Co-Chairs:

Time: 11:20–14:20

Hall: C

14:20–15:00 Lunch

- 1. Consideration for formal cybersecurity models in I&C system design**
by Vitaly G. Promyslov, V.A. Trapeznikov Institute of Control Sciences of the Russian Academy of Sciences, Russia.

- 2. The use of Cryptography in Network Security**
by Zafar Jafarov, Azerbaijan Technical University, Azerbaijan.

- 3. Development of hybrid intelligent system of expressdiagnostics for detection potential attacker**
by A. E. Yankovskaya, TSUAB, TSU, TUSUR, SSMU, Russia; A. A. Shelupanov, I. A. Hodashinsky, I. V. Gorbunov, TUSUR, Russia.

- 4. Model of Role-based Access to Spatial Data of Electronic Master Plan**
by Yury B. Gritsenko., Mikhail M. Milikhin, Pavel V. Senchenko, Oleg I. Zhukovsky, Tomsk State University of Control Systems and Radioelectronics, Russia.

- 5. Security Attacks and Countermeasures in Surveillance Wireless Sensor Networks**
by Seyyit Alper Sert, Ertan Onur, Adnan Yazici, Middle East Technical University, Turkey.

- 6. Policy algebra for access control in enterprise document management systems**
by Ivan Tarkhanov, State Academic University for the Humanities, Russia.

- 7. Monitoring of the Information Security of Wireless remote devices**
by N. Bazhayev, I. Lebedev, V. Korzhuk, I. Zikratov, ITMO University, Russia.

- 8. Biometric Student Identification Using Low-frequency Eye Tracker**
by Andrey V. Lyamin, Elena N. Cherepovskaya, ITMO University, Russia.

- 9. New Encryption Technique Using the Meaning of Location Algorithm**
by Hassan M. Elkamchouchi, Mahmoud Shawky, Alexandria University, Egypt.

- 10. Implementation of dynamically autoconfigured multiservice multipoint VPN**

by Petr Polezhaev, Alexander Shukhman, Youri Ushakov, Orenburg State University, Russia.

11. Method to Counter the threat of Covert Channels in LONWorks-based Industrial Control Systems

by Igor I. Bezukladnikov, Efim L. Kon, Perm National Research Polytechnic University, Russia.

12. Tool for I&C system Security Policy Verification

by Vitaly G. Promyslov, V.A. Trapeznikov Institute of Control Sciences of the Russian Academy of Sciences, Russia.

13. Malicious Hypervisor and Hidden Virtualization of Operation Systems

by Anton Sergeev, Victor Minchenkov, Vladimir Bashun, Saint-Petersburg State University of Aerospace Instrumentation, Russia.

14. Related-Key Rectangle Cryptanalysis of Reduced-Round Block Cipher MIBS

by Kexin Qiao, State Key Laboratory of Information Security, China; Lei Hu, Institute of Information Engineering, China; Siwei Sun, Chinese Academy of Sciences Data Assurance and Communication Security Research Center, China; Xiaoshuang Ma, Chinese Academy of Sciences, China.

SESSION 4.1
LATEST TRENDS IN ICT APPLICATION

Session Co-Chairs:

Time: 11:20–14:20

Hall: D

14:20–15:00 Lunch

1. Towards the Problem of Risk Assessment in the Safety Management System of an Airline

by Elena Jharko, Ekaterina Sakrutina, V.A. Trapeznikov Institute of Control Sciences of the Russian Academy of Sciences, Russia.

2. Computerized Environment for Conceptual Experimenting in Designing the Systems with a Software

by Petr Sosnin, Ulyanovsk State Technical University, Russia.

3. The hybrid reconfigurable system for high-performance computing

by Lyashov M.V. , Alekseenko J.V. , Bereza A.N. , Blanco L.M.L. , Technical University, Russia.

4. Comparison of User Performance and Satisfaction of Tablet Virtual Keyboards in Three Different OS Environment

by Yeliz Korkmaz, Pınar Onay Durdu, Kocaeli University, Turkey.

5. Mobile Indoor Navigation System in iOS Platform Using Augmented Reality

by Ibrahim Arda Cankaya, Arif Koyun, Tuncay Yigit, Asim Sinan Yuksel, Suleyman Demirel University, Turkey.

6. Multimodal Natural Interaction for 3D Images

by Fatih Ergüner, Pınar Onay Durdu, Kocaeli University, Turkey.

7. Binary Knowledge Model: specifying, instantiating, and interpreting advanced ontologies

by G.S. Plesniewicz, D.E. Masherov, Nguen Thi Min Vu, National Research University “MPEI”, Russia; A.B. Karabekov, Institute of Informational and Computational Technologies MES, Kazakhstan.

8. Quantum Gates Transform Optimization Algorithm for Quantum Computer Modeling

by Vyacheslav Guzik, Sergey Gushanskiy, Evgeny Kubrakov, Maxim Polenov, Southern Federal University, Russia.

9. Determining the Minimum Cost Flow in Fuzzy Dynamic Network with GIS «ObjectLand»

by Alexander Bozhenyuk, Evgeniya Gerasimenko, Southern Federal University, Russia; Igor Rozenberg, Public corporation "Research and development of railway engineers", Russia.

10. Simulation of two-channel bulk materials metering system

by Aizhan Erulanova, Gennadii Shadrin, Natalia Arinova, Ielibek Asangaliiev, D. Serikbaev East Kazakhstan State Technical University, Kazakhstan.

11. A Simple Auditing Mechanism for Financial Reports in e-Ledger Project

by Burçin Camcı, Salih Bayar, Mehmet Görkem Ülkar, Boğaziçi University, Turkey.

12. The Parallel Simulated Annealing-Based Reconfiguration Speedup Algorithm for the Real Time Distributed Control System Fault-Tolerance Providing

by A.B. Klimenko, V.V. Klimenko, SFedU Acad. Kalyaev Scientific Research Institute of Multiprocessor Computer Systems, Russia; Eduard Melnik, OOO "Neirosetevye technologii", Russia.

13. Modeling of a Motion of Hand Prosthesis Based on the Fuzzy Deductive Inference Scheme

by Alexander Bozhenyuk, Vitalii Bozheniuk, Alexandra Khamidulina, Southern Federal University, Russia.

14. Smart Control System of Gas Wells Cluster Provides a Mode of Maximum Pressure

by Gulyaev S.V., Pashchenko F.F., Pashchenko A.F., Institute of Control Sciences of Russian Academy of Sciences, Russia.

SESSION 5.1
COMMUNICATION, NETWORK AND HARDWARE

Session Co-Chairs:

Time: 11:20–14:20

Hall: E

14:20–15:00 Lunch

1. Analog-Controlled Feedback for Predistortion of GaN Power Amplifier

by Aleksandr Timoshenko, Konstantin S Tafintsev, Ksenia Lomovskaya, National Research University of Electronic Technology - MIET, Russia; Alexey Lisov, Joint Stock Company «Russian Space Systems», Russia.

2. Fuzzy Annealing Temperature Controllers for Bell-Type Electric Furnaces

by Kudinov Y.I., Kudinov I.Y., Lipetsk State Technical University, Russia; Pashchenko A.F., Pashchenko F.F., Durgaryan I.S., Institute of Control Sciences of Russian Academy of Sciences, Russia.

3. Channel Estimation for Spatial Modulation-Orthogonal Frequency Division Multiplexing Systems

by Hakan DOĞAN, Istanbul University, Yusuf ACAR, Istanbul Kultur University, Erdal PANAYIRCI, Kadir Has University, Turkey.

4. An Application of Building Automation System based on Wireless Sensor/Actuator Networks

by Seyit Alperen Çeltek, Karamanoglu Mehmetbey University, Turkey; Hakki Soy, Necmettin Erbakan University, Turkey.

5. FPGA-based approach for organization of SDN switch

by Anatoly Kalyaev, Eduard Melnik, SFedU Acad. Kalyaev Scientific Research Institute of Multiprocessor Computer Systems, Russia.

6. An Easy to Implement and Energy-saving Anti-Collision Algorithm for RFID Systems

by Rafael Perazzo Barbosa Mota, Daniel M. Batista, University of Sao Paulo - USP, Brazil.

7. Extended Recursive Soft Sequential Estimation of m-sequences

by Michael Balanov, MIREA, Russia; Dmitriy Prozorov, Vyatka State University, Russia.

8. Recognition of 3D object using Kinect

by Sagandykova Aigerim, Askarbekuly Askhat, Amirgaliyev Yedilkhan, Suleyman Demirel University, Kazakhstan.

9. Development of a method for the synthesis of topology in infocommunication systems

by A.A. Sorokin, P.S. Reznikov, Astrakhan State Technical University, Russia.

10. Research on Architecture and Evolution of the European Union Meta-Network Model

by Kun Wang, Duoyong Sun, National University of Defense Technology, China.

11. Raising the Effectiveness of Data Processing In Automated Information Control Systems

by A. Galkin, D. Dyatchina, A. Pogodaev, Lipetsk State Technical University, Russia.

12. Accelerating Medoids-based Clustering with the Intel Many Integrated Core Architecture

by Timofey Rechkalov, Mikhail Zymbler, South Ural State University, Russia.

13. Comparison of Scheduling Algorithms for Multimedia Applications in IPv4 and IPv6

by Murat Koyuncu, Hayder Al-Fayyadh, Atılım University, Turkey.

14. Graphical framework for scientific papers clustering

by Tamara Trofimenko, Alexander Visheratin, Mikhail Melnik, Ksenia Mukhina, Nikolay Butakov, ITMO University, Russia.

15. Research on Regional Collaborative Innovation Evolution from Complex Network Perspective

by Kun Wang, Duoyong Sun, National University of Defense Technology, China.

SESSION 6.1
ICT IN EDUCATION, HUMANITIES, SOCIAL SCIENCES AND
RESEARCH

Session Co-Chairs:

Time: 11:20–14:20

Hall: F

14:20–15:00 Lunch

- 1. Use of modern information and computer technologies in historical and urban studies with the example of epidemiological situation in the city of Simbirsk**

by Andrei Guschin, Vadim Shmelev, Vladislav Karbovskii, ITMO University, Russia.

- 2. Using Automaton Model to Determine the Complexity of Algorithmic Problems for Virtual Laboratories**

by E.A. Efimchik, M.S. Chezhin, A.V. Lyamin, A.V. Rusak, ITMO University, Russia.

- 3. Information technology to assess the level of competence in the educational process**

by Gusyatinikov Viktor Nicolaevich, Bezrukov Alexey Iosifovich, Sokolova Tatyana Nikolaevna, Kayukova Inna Victorovna, Plekhanov Russian University of Economics, Russia.

- 4. Mathematical Basis and Information System Software for Educational Institutions Ranking**

by Indira Uvalieva, D. Serikbaev East Kazakhstan State Technical University, Kazakhstan; Ruslan Chettykbayev, Kazakh American Free University, Kazakhstan; Anar Utegenova, Kazakh National Technical University after K.I.Satpaev, Kazakhstan; Shara Toibayeva, «Turan» University Almaty, Kazakhstan.

- 5. Quality Assessment of Remote Real Experiments and their Use in Practice**

by Danka Lukáčová, Gabriel Báñez, Alena Hašková, University of Constantine the Philosopher in Nitra, Slovakia.

- 6. Evaluation based on databases of scientific publications measuring the transdisciplinarity of scientific problems**

by Nikita Kogitkov, Alexey Dukhanov, Tamara Trofimenko, ITMO University, Russia.

- 7. Informational and Technological Support of Foreign Language Training in High School**

by Pisarenko Veronika, Ecological and Social Systems of Southern Federal University, Russia.

8. Academic Papers Evaluation Software

by Viacheslav Lanin, Svetlana Strinyuk, National Research University Higher School of Economics, Russia; Yuliya Shuchalova, Perm State National Research University, Russia.

9. Kinematic Precision Analysis for Complex Assembly Systems using Information Stream Integration

by Li Hai, Zhu Haiping, Zhou Xuan, Huazhong University of Science & Technology, China.

10. New trends in implementation of ICT in Higher Education

by Galina Kedrova, Sergei Potemkin, Lomonosov Moscow State University, Russia.

11. Analysis and Classification of Fractures with Use of Algorithms Fuzzy Inference

by Openko Natalia, South Federal University, Russia.

12. Complexity Revisited

by Mohammad Ghiasi, Iran.

13. Overview and problem state of ontology models development

by Kureychik V.M. , South Federal University, Russia.

14. Technical Problems Experienced in the Virtual Learning Environment and Coping Strategies

by Yuksel Goktas, Ataturk University, Turkey; Murat Coban, Agri Ibrahim Cecen University, Turkey; Turkan Karakus, Ataturk University, Turkey.

15. Analysis and Evaluation Methodology for Route Planning Applications in Public Transportation

by Efendi Nasiboglu, Alican Bozyigit, Yigit Diker, Dokuz Eylul University, Turkey.

16. The Realization of Programs: "Occupational Safety and Health (OSH)" and "Health Safety and Environmental (HSE) Management System"

Andrienko A.S., Dmitrieva I.A., Bakaeva T.N., Popova O.V., Tolmacheva L.V., Southern Federal University, Russia

17. Computer Support of "Psychology of Communication" Discipline as a Part of "International Scientific and Technical Communications" Course

Andrienko A.S., Dmitrieva I.A., Popova O.V., Southern Federal University, Russia

AICT2015 International Conference



OCTOBER, 2015

Locations:
SOUTHERN FEDERAL UNIVERSITY
Main Building

16 October 2015

Location: SOUTHERN FEDERAL UNIVERSITY

Main Building

Address: Sadovaya str., 105/42, Rostov-on-Don

10:00–13:00

CONCURRENT TECHNICAL SESSIONS

**JOINT SESSION 2.2 and 4.2
DATA MINING AND DATA ENGINEERING &
LATEST TRENDS IN ICT APPLICATION**

Session Co-Chairs:

Time: 10:00–13:00

Hall: A

11:40–12:00 Coffee Break

- 1. A Novel Cardholder Behavior Model for Detecting Credit Card Fraud**
by Yiğit Kültür, Mehmet Ufuk Çağlayan, Boğaziçi University, Turkey.
- 2. The Principles of Analytic Decision Support System Construction on The Basis of Fuzzy logic**
by Natalya Bereza, Maxim Lyashov, Andrey Bereza, Luis Blanco, Technical University, Russia.
- 3. Using Hybrid Model of Artificial Bee Colony and Genetic Algorithms in Software Cost Estimation**
by Farhad Soleimanian Gharehchopogh, Hacettepe University, Turkey, Isa Maleki, Akbar Talebi, Islamic Azad University, Iran.
- 4. An Approach to Personalized Video Summarization Based on User Preferences Analysis**
by Maria Miniakhmetova, Mikhail Zymbler, South Ural State University, Russia.
- 5. Creation and Use of Ontology of Subject Domain "Electrical Engineering"**
by Le Thanh Tung Nguyen, Matokhina A. V. , Kizim A. V. , Volgograd State Technical University, Russia.
- 6. On-Chip Hardware Accelerators for Data Processing and Combinatorial Search**
by Valery Sklyarov, Iouliia Skliarova, University of Aveiro, Portugal.

7. Development of the Translation Tools for Distributed Storage of Models

by Maxim Polenov, Vyacheslav Guzik, Sergey Gushanskiy, Artem Kurmaleev, Southern Federal University, Russia.

8. Parameter Selection in Fuzzy Joint Points Clustering Algorithms

by Efendi Nasibov, Can Atilgan, Dokuz Eylul University, Turkey.

9. Control of UML diagrams in designing automated systems software

by A.N. Afanasyev, N.N. Voit, E. Yu. Voevodin, Ulyanovsk State Technical University, Russia; R.F. Gainullin, Ltd «Ewid», Russia.

10. Three-dimensional Content in Mobile Applications for Educational Information Systems

by A. A. Lezhebokov, D.V. Zaruba, D.Y. Zaporozhets, Southern Federal University, Russia.

11. Statistical Inference In Automatic License Plate Recognition System

by B. Y. Amirgaliyev, C. A. Kenshimov, IITU, Kazakhstan; Z. Y. Baibatyr, K. K. Kuatov, M. Z. Kairanbay, A. K. Jantassov, ABY Applied Systems, Kazakhstan.

12. Optimized stock market prediction using ensemble learning

by Muhammad Asad, College of Electrical & Mechanical Engineering, NUST, Pakistan.

13. Fault tolerant architecture for the hazardous object information control systems

by Vladimir Korobkin, Eduard Melnik, Anna Klimenko, SFedU Acad. Kalyaev Scientific Research Institute of Multiprocessor Computer Systems, Russia.

14. A Channel Trust Based Approach for Congestion Control in IoT

by Moumita Poddar, Rituparna Chaki, University of Calcutta, India; Debdutta Pal, CIEM, India.

15. LeVen – a Parallel System for Simulation of the Heart Left Ventricle

by Andrey Sozykin, Sergey Pravdin, Anton Koshelev, Vladimir Zverev, Konstantin Ushenin, Olga Solovyova, Ural Federal University, Russia.

SESSION 5.2
COMMUNICATION, NETWORK AND HARDWARE

Session Co-Chairs:

Time: 10:00–13:00

Hall: B

11:40–12:00 Coffee Break

1. Neurocomputer interface, the classification of the brain waves and virtual reality control

by Viktors Gopejenko, Ilja Mihailovs, ISMA University, Latvia.

2. Features of information flows in the backbone Internet-channel: the analysis of the statistical characteristics of the relationship between the number

by Porshnev S.V., Kuposov A.S., Bozhalkin D.A. , Ural federal university named after the first President of Russia B. N. Yeltsin, Russia.

3. Conditional Probability Density Estimation Using Artificial Neural Network

by G.V. Kobyz, A.V. Zamyatin, Tomsk State University, Russia.

4. Carbon Emission-Aware Routing Protocol in Vehicular Ad-hoc Networks

by Ghulam Yasin, University of Education, Pakistan; Syed Fakhar Abbas, Auckland University, New Zealand; Waseem Iqbal, The University of Lahore, Pakistan.

5. Cyclic Prefix Based Time Synchronization and Comb Type Channel Estimation for SC-FDMA Systems over Time-Varying Channels

by Niyazi Odabasioglu, Mehmet Merih Leblebici, Bahattin Karakaya, Hakan Dogan, Istanbul University, Turkey.

6. Convergence in Local Press

by Ozhan Tingoy, Sevki Isikli, Marmara University, Turkey; Ali Ozcan, Gumushane University, Turkey.

7. Visual representation characteristics of calculation results in laboratory research on electromagnetic ecology

by Zvezdina M.Yu., Shokova Yu.A., Shokov A.V., Don State technical University, Russia.

8. Design of MEWMA Control Chart for Process Subject to Quality Shift and Equipment Failure

by Hui Yin, Haiping Zhu, Guojun Zhanga, Yuhao Deng, Huazhong University of Science and Technology, China.

9. Hypergraph model of hierarchical client-server architecture for distributed computing

by V.M. Glushan, P.V. Lavrik, M.V. Rybalchenko, South Federal University, Russia.

10. CMOS-Based UWB Bandpass Filter with In-band Interference Cancellation

by Abdelhalim A. Saadi ^{1,2}, Mustapha C.E. Yagoub ³, Rachida Touhami ², Abdelhalim Slimane, Abdelkader Taibi, Mohand T. Belaroussi, ¹Centre de Développement des Technologies Avancées, Algeria, ²Laboratory of Instrumentation, USTHB, Algeria, ³University of Ottawa, Canada.

11. Studying methods of data traffic management in wireless networks in the terms of uncertainty

by V.N. Dmitriev, A.A. Sorokin, Q.T. Tran, K. T. Pham, Astrakhan State Technical University, Russia.

12. Digital modulator for fiber-optical networks

by Yashar Hajiyev, Qafqaz University, Azerbaijan.

13. Development "Filtration" Software for the Digital Processing of the Measuring Signals

by Naila Allakhverdiyeva, Baku Higher Oil School - BHOS, Azerbaijan.

14. Increasing the information capacity of the interface of the control system for multiparameter objects

by Kosnikov Yu.N. , Penza State University, Russia.

SESSION 6.2
ICT IN EDUCATION, HUMANITIES, SOCIAL SCIENCES AND RESEARCH

Session Co-Chairs:

Time: 10:00–13:00

Hall: C

11:40–12:00 Coffee Break

1. Decision-Making Support for Human Resources Management on the Basis of Multi-Criteria Optimization Method

by Mammadova M.G. , Jabrayilova Z.G. , Institute of Information Technology of ANAS, Azerbaijan.

2. Models of a quantum computer, their characteristics and analysis

by Vyacheslav Guzik, Sergey Gushanskiy, Maxim Polenov, Victor Potapov, Southern Federal University, Russia.

3. New Information Technologies in Ethnopedagogical Process

by Arsaliev Shavadi, Chechen State University, Russia.

4. Game-based Approach for Retaining Student’s Knowledge and Learning Outcomes

by Dmitrii S. Kopylov, Margarita K. Fedoreeva, Andrey V. Lyamin, ITMO University, Russia.

5. Simulator and Benchmark for RFID Anti-Collision Evaluation

by Rafael Perazzo Barbosa Mota, Daniel M. Batista, University of Sao Paulo - USP, Brazil.

6. Development of the Educational Skills of Primary School Learners through ICT

by Viera Tomková, Ivana Žemberová, Constantine the Philosopher University in Nitra, Slovakia.

7. Models of Educational Process Activation

by V.V. Bova, Yu.A. Kravchenko, A.A. Lezhebokov, D.Yu. Zaporozhets, Southern Federal University, Russia.

8. How to Improve Professional Competences of Technical Subject Teachers

by Alena Hašková, Peter Kuna, Eva Malá, Constantine the Philosopher University in Nitra, Slovak Republic; Dirk Van Merode, Thomas More University, Belgium.

9. Heuristic Evaluation of a Mobile Hand-Writing Learning Application

by Banu Yilmaz, Pınar Onay Durdu, Kocaeli University, Turkey.

10. E-learning Technologies as Basis of Formation of the Integrated Training in the Educational Services

by V.V. Bova, Yu.A. Kravchenko, V.V. Kureichik, D.V. Zaruba, Southern Federal University, Russia.

11. Application of the conceptual model of knowledge for formalization of concepts of educational content

by Bulat Kubekov, Janna Kuandykova, Irbulat Utepbergenov, Turan University, Kazakhstan; Anar Utegenova, Kazakh National Technical University after K.I.Satpaev, Kazakhstan.

12. Automated Formation of the Interactive Tasks for the Computer-Aided Training

by A.N. Dukkardt, Dukkardt Software Inc. , Canada; E. V. Kuliev, Vl. Vl. Kureichik, A.A. Novikov, Southern Federal University, Russia.

13. Tests in education and their application in the electronic environment

by Nikiforov N.S., Lavrinenko S.V., National Research Tomsk Polytechnic University, Russia.

14. Molecular Dynamics Simulation of Spatial Structure of Rat/Mouse Hemokinin-1

by U.T.Agaeva, G.A.Agaeva, Baku State University, Azerbaijan; N.M.Godjaev, Qafqaz University, Azerbaijan.

15. Necessity of Development Intellectualization in XXI Century

by Lamara Qoqiauri, Technical University of Georgia, Georgia.

13:00–14:00 Lunch

14:00–14:30 SFedU Walking Tour

**14:30–15:00
Hall: Main**

CLOSING CEREMONY