



3rd INTERNATIONAL YOUTH SCIENCE FESTIVAL "LITTERIS ET ARTIBUS"

5th INTERNATIONAL CONFERENCE OF YOUNG SCIENTISTS "COMPUTER SCIENCE & ENGINEERING 2011" (CSE-2011)

NOVEMBER 24-26 2011, LVIV, UKRAINE



CONFERENCE PROGRAMME

NOVEMBER 24

08:30 – REGISTRATION OF PARTICIPANTS STARTS

In front of the Assembly hall of the 1st building of Lviv Polytechnic National University (Karpins'kogo street 2/4)

09:00 - 10:30 – LVIV STUDENT SHORT FILM RETROSPECTIVE

Assembly hall of the 1st building of Lviv Polytechnic National University (Karpins'kogo street 2/4).

10:30 - 12:00 – CEREMONIAL OPENING OF THE FESTIVAL OF SCIENCE

Assembly hall of the 1st building of Lviv Polytechnic National University (Karpins'kogo street 2/4).

12:00 - 13:00 – LVIV POLYTECHNIC TOUR

13:00 - 14:00 – LUNCH

*Canteen in the 1st building of Lviv Polytechnic National University (Karpins'kogo street 2/4, basement).
Alternatively – University canteen (Karpins'kogo street 6)*

14:00 - 18:00 – CONFERENCE SESSIONS

SESSION 1. APPLIED AND COMPUTATIONAL LINGUISTICS

Room 108, 5th building of Lviv Polytechnic National University (Bandery street 28a).

Abramkova N. Morphological coding in the English corpus

Kotyk S. Morphological Tagging of Verbforms at Corpora of English Texts

Lyman K. An approach to estimation of semantic similarity of texts based on topic distribution analysis

Marakhovska N. The Coverage of the Ukrainian Political Communication 2007 in the Frankfurter Allgemeine Zeitung
(Publications' Computer Content Analysis)

Bondaruk O. Content analysis in Lingual Semiotic Research of Shakespeare' Sonnets

Polyuha M. Contrastive analysis of synsets "WAY" in English and "ШЛЯХ" in Ukrainian as the basis for WordNet analysis

Poliakova I. Functional characteristics and morphological annotation of verbs in English abstracts

Ripetska I. Machine learning as priority approach to build automated classifier of scientific texts

Soprnyuk O. Lexical representation of human statuses in Tudor times: Tudor court titles

Ignatova T. Automatic Summarization of Scientific Papers (Based on Abstracts)

Khlevna M. Contrastive Analysis Of Lexico-Semantic Fields As The Problem Of Machine Translation

Hudan P. The structural types of predicative centre of English sentence

Tsiupka M. Nouns denoting Time in English and in Ukrainian: Contrastive Analysis and Translation Issues

SESSION 2. COMPUTER SYSTEMS AND NETWORKS

Room 508, 5th building of Lviv Polytechnic National University (Bandery street 28a).

Veselovskyy A., Deibuk V. Optimal synthesis of quantum logic circuits

Melnyk V., Sarairoh Z. Method of hardware accelerator self-configuring

Gros V., Vavruk E. The concept of improving fault tolerance of distributed recovery blocks in real-time on-board systems

Ignatenko O. Game-based fluid models of network control

Romanov O. The optimal topologies of networks on chip

Oleksiv M. The specialized digital image filtering processor

Mashchak A. Development of structural-automatic model network with random multiple access

SESSION 3. MATHEMATICAL MODELLING AND COMPUTATIONAL APPROACHES

Room 304, Main building of Lviv Polytechnic National University (Bandery street 12).

- Brzeski A.* Parameters optimization in medicine supporting image recognition algorithms
Brzeski A. Parallelization of video stream algorithms in Kaskada platform
Velichko A. Combinatorial approach to find a multiple nonlinear regression
Tudoran V. Computer Simulation of 2-D Liquid Flow for Studing the “Memory Effect” in the Ship Hull Loadings Calculation
Korendiy V. Finding of Extremum of Functional with an Unknown Parameter at Design of Work of the Wind Turbine
Hnativ B., Kavalets I. Mathematical modeling of controlling chaos in the Cournot-Puu model of oligopoly
Yegorova O. Compositional technique of solving linear programming problems
Shytsova L. The identification method of instrumental errors of initial convertors of inclinometer according to the results of experimental researches
Ivasiv I., Kolych I. Fast Technique of Shells’ Modification in the Modelling Algorithm for Dense Packing the Spherical Particles with the Virtual Multilayer Interpenetrable Shells
Kvyatkovskyy B. Adaptive decoupled transient analysis of electronic circuits models
Kostrobij P., Markovych B., Zadvorniak I. Investigation the influence of external electric field on pair effective potential of electron-electron interaction in semi-infinity metal
Markova O., Zheldak T. The reasonable choice of ranging criteria correlation in multiple target pursuit problem
Mykoshha N. The peculiarities of the problem solving of the characteristic optimization of tramp ship in random external conditions of its functioning
Novikova O. Fractal Splines in Currency Rates Analysis

SESSION 4. RADIOELECTRONIC AND INFORMATION-TELECOMMUNICATION SYSTEMS AND DEVICES

Room 218, 11th building, Lviv Polytechnic National University (Profesors'ka street 2)

- Buhil B., Kagalo I.* Information Flows Improved Routing Based on the Optimal Network Resources Allocation
Romanchuk V., Chervenets V. The research of probabilistic properties of corporate multiservice network traffic
Vovchenko V. Analysis of reducing capacity in the presence and absence of correlation in the channels of communication with MIMO
Eliyashiv O., Polıtanskiy L. On-line impulse chaotic generator based on Chua scheme
Hotra Z., Volyniuk D., Chomyak S., Voznyak L., Kostiv N. Calculation of quantum-chemical parameters of organic semiconductor
Shelevitskiy I., Yurko Y., Yurko O. Spline Processing of Multidimensional Radio Signals
Koval K., Lazarev A., Semenov A. Low pass filter based on a FET transistor structure with negative resistance
Koretskii R., Nichkalo S., Kogut Y., Berezhanskii Y. Telecommunication StrainMeasuring System
Krasko O. Analysis of the efficiency of construction photonic transport networks
Pavlyk L., Ubizskii S. FluxgateMagnetic Field Transducer with Rotation Magnetization Reversal of the Film Core
Lomakina O. Analysis of Gesture Recognition Methods Based on Features Detection
Maksymyuk T., Dumnych S. Increasing the spectral efficiency of OFDM signal
Melnychuk A. Signal frequency effect on precision of surface acoustic wave devices
Lavriv O., Shyika Y. Service Quality Analysis for Multimedia Information Distribution System
Panskyy T. The Development of Structure-Automaton Models of Radioelectronic Systems with Majority Structure
Bak R., Polishchuk A. Comparison of The Effectiveness of Systems Wirelessly Using Grapho-analytical Method
Khrapko S., Eliyashiv O. Online pulse-exciting chaotic generator
Shelevytska K., Semenova O. Application of Spline Basis for Solving of Some Radio Imaging Tasks
Shkiliuk O. Modelling of Behavior of Radioelectronic Complex
Hoblyk V., Subota I. The development of materials with negative dialectical and magnet transmittivity: the modern situation and development perspectives
Krysko R., Tyhanskiy M. Digital Logic Elements on the Base of Particular Josephson Tunnel Junctions
Koval K., Lazarev A., Semenov A. Low pass filter based on a FET transistor structure with negative resistance
Panecki S. Power Line Communication – efficient solution for modern communications systems

SESSION 5. INFORMATION-MEASURING TECHNOLOGIES

Room 609, 5th building of Lviv Polytechnic National University (Bandery street 28a).

- Soprunyuk P., Yuzevych V., MelnykM., Soprunyuk O.* Limnology projects managment in the use of ecological indexes information
Barylo G., Grycyk R., Kus N. Data transmission to systems of technological process monitoring
Pereidenko A., Shegedin P. Nondestructive Testing of Cell Panels with Fuzzy-Art Neural Network
Sierbovm., Voronko I. Diffraction method for holes quality control
Silveistruk L. Relations Between Different Types of Cardinality Constraint in the Entity-Relationship Model
Pylypchyn A. Algorithms for processing measuring signals in the logarithmic system

SESSION 6. INFORMATION SECURITY

Room 202, 19th building of Lviv Polytechnic National University (Knyazya Romana street 1).

- WodoW., Wolny K.* DHCP Spoofing
Biktasheva S., Storozhenko A., Gonchar T. Thin RFID technology in protect documents
Chernish V., Ivanov K., Volobuiev B., Zhukov I. Analytic approach to the evaluation methodology and management of information security risks
Shutovskiy V. Information security risks assessment of information systems using event tree analysis

Galiuk S., Kushnir M., Vovchuk D. Using the generalized synchronization regime for hidden communication
Garasym Y. Restoration procedure as a mechanism for Information Security System Survivability Providing
Knyazyev D. GSM information security system improvement
Dosyn D., Garasym Y., Lesnyak O. Enterprise communication networks confidential information encryption system development
Duboviy E. Investigation of acoustoelectric effects by using a differential amplifier
Budz B., Karioti M. Vulnerability analysis of CCTV and measures of their elimination
Lyashenko M. Research the influence of interior on acoustic field distribution in the protected premises
Mandrona M. Protect information from unauthorized access in wireless networks
Nechpor V. CPNTools Usage in Tasks of Information Security Risk Assessment
Polischuk O., Lagun A. Design of block cipher (FBC) based on the Feistel network
Pulya P. The Access Control System Reader Implementation Based on Radio Frequency Identification
 Using Lightweight Encryption
Rodin S. Ways to improve survivability security systems
Kostiv Y., Mykytyuk M. Methods for detecting remote attacks on the Internet
Reshetar Y., Sovyn Y. Differential fault-analysis of GOST 28147 block cipher implementations
Likholob P. Robust label coding of digital watermark in the speech communication
Kret T. Information Assets Description Methods in Creating Information Security Management System
Vasinovich V., Rakobovchuk V. Semiconductor laser with continuous action (660nm) and studying of its options
Poluektova O. Expert Systems Information Classification Analysis for Enterprise Communication Networks Security Estimation
Ruban I., Prybylnoy D. Classification of network threats
Kret T., Banakh R. The Research of Lightweight Cryptography Algorithms

SESSION 7. WORLD WIDE WEB AND SOCIAL COMMUNICATION

Room 520, 4th building of Lviv Polytechnic National University (Nevs'kogo street 3)

Sloboda K. Using Social Networks to Form the Authority of University
Fedushko S., Peleschyshyn A., Syerov Y. Definition methods of socio-demographic characteristics
 of the users' social communications
Tymovchak-Maksymets O. Analyzing Motivational User Incentives for Generating Textual Information Content on Web Forums
Yakovyna V., Kaminskiy R., Smirnov V. The survey of near-duplicate revealing techniques for application to automated quiz review
Ryshkovets Y. Web-gallery Visitor Behavior Features
Berezko O., Peleschyshyn A., Zhezhnych P. Conception of Modern University Website Development:
 Case Study of Lviv Polytechnic National University

NOVEMBER 25

10:00 - 13:00 – CONFERENCE SESSIONS

SESSION 8. INFORMATION SYSTEMS

Room 108, 5th building of Lviv Polytechnic National University (Bandery street 28a).

Blokus A., Jędrzejewski M. The design of an intelligent medical space supporting automated patient interviewing
Ahmadikatoouli A. Transformation of SBVR Business Design to Petri nets Models
Cychnerski J. Artificial intelligence support for disease detection in wireless capsule endoscopy images of human large bowel
Belikov P. User motivation research for information lifecycle management
Andriyetskiy B. Neural-like structures of the geometrical transformation machine and methods to enhance their accuracy
Buy D., Glushko I. Table algebras of infinite (finite) tables, corresponding relational calculi and their equivalence
Ovsyak V., Niziolek M., Petruszka J. Model XML-description of compound uniterms of formulas algorithms
Veres O., Evoyan E. Information intelligent system of the film distribution activities
Zabolotna A. The method of transmission of SDL - specifications using high-level Petri nets
Zyanchurina I., Nekrasov V. The organization of passage and calculation of test norms
Kuznyetsova N. Clients' data analysis using Bayesian networks
Lyubinsky B. Architecture of specialized software modules for composition and disaggregation of objects in inventory
 of greenhouse gas emissions
Ovsyak O. Functional model of information technologies and systems
Duban R. Information system to support test control of knowledge "Logit"
Tkachenko R., Mashevska M. Creation of a controller of fuzzy logic for predicting the level of biocomfort
 of staying of a human in a housing environment
Surianinov N., Korniyenko Y. Universal Program of Realization of Algorithm Boundary Elements Method
Saoud E. Formal specification of access control Model for relational databases using UML and OCL
Halych K., Teslyuk V. Development of system for automation of optimal menu forming in preschool educational institutions
Teslyuk V., Pukach A., Zelynskiy A. Information support system analysis and synthesis of microelectromechanical systems
Torubka T., Puyda V. Research of the image enhancement algorithm for moving objects
Yavlinskyy O. Main tasks and requirements of Knowledge Management Systems
Levchenko O. The tasks of corporate information systems database testing
Ruban I., Shitova O., Smelyakov K. A method for processing of informative domains of images in optical monitoring systems
Myshchysyn V., Zhezhnych P. Analyzing e-Government Implementation Features
Kremen T., Yakovyna V., Synyska O. Using Elman neural network for software reliability forecasting
Garbich-Moshora O., Kosovska O., Shiling A. Standard Scorm: an overview

13:00 - 14:00 – LUNCH

*Canteen in the 1st building of Lviv Polytechnic National University (Karpins'kogo street 2/4, basement).
Alternatively – University canteen (Karpins'kogo street 6)*

14:00 - 18:00 – CONFERENCE SESSIONS

SESSION 9. MATHEMATICAL MODELLING AND COMPUTATIONAL APPROACHES

Room 304, Main building of Lviv Polytechnic National University (Bandery street 12).

- Zolotukhin O.* Classification polythematic documents using neural fuzzy approach
Ivanyuk P., Poliansky R. Calculation of Lyapunov exponent spectrum for hyperchaotic systems
Obukhivskiy R., Tsegelyk H. The optimal model index sequential database files for multiprocessor systems
Semenyuk S., Chabanyuk Y. The generator of stochastic system fluctuations with impulsive perturbations in the absence of equilibrium point conditions
Semeniakin V., Zabolotnia T. The heuristic function for comparing polar angles of the vectors defined in two-dimensional rectangular coordinate system
Mykhailovych T. Method of Water Demand Forecasting by Using the Model of Periodic Autoregression
Tryasuchev P., Kritski O. Kernel estimation of the volatility
Rudakevych T., Tsehelyk H. Construction of optimal block search in case of uneven distribution law for database file entry's selection probabilities
Cherkashin K. Application of adaptive Particle Swarm Optimization method (PSO) to solving the problem of clustering in the actual space
Shcherbovskykh S. Reliability Model for Simple Dendritic Renewal System with Load Re-distributing Consideration
Tkachenko Y., Martyniec B. Hard form computation of the soft cylindrical casing
Shapoval A. Bank customers segmentation model
Romanyshyn Y., Petrytska S. Signals filtering in neural networks
Korendiy V. Inverse Problem of Calculus of Variations in Modeling the Dynamics of the Wind Turbine

19:00 – INFORMAL MEETING (CLOSING PARTY)

University canteen (Karpins'kogo street 6).

NOVEMBER 26

EXCURSIONS DAY

For more information please visit the official conference website – <http://cse.ukrscience.org>