



**Technical University of Sofia
Faculty of Computer Systems and Control**



**University of Elbasan "Aleksandër Xhuvani"
Informatics Department**

P R O G R A M

7th International Scientific Conference

COMPUTER SCIENCE'2015

08-10 September 2015, Durrës, Albania

CONFERENCE CHAIRS

Plamenka Borovska,

Technical University of Sofia, Bulgaria

Elior Vila,

University of Elbasan "Aleksander Xhuvani", Albania

VICE CHAIRS

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Technical University of Sofia, Bulgaria

Liman Varoshi,

University of Elbasan "Aleksander Xhuvani", Albania

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TOPICS

- Computer Systems and Networks
- Software Systems and Methodologies
- Information Management and Technologies
- Grid and Cloud Computing
- Computational Intelligence
- PhD and Students' Section

Tuesday, September 8th, 2015

9:00 – 12:00 Registration

10:30 – 11:00
Opening Ceremony

Conference Hall 1

11:00 – 12:30
Plenary Session

Chairs: *Plamenka Borovska*
Elior Vila

Conference Hall 1

1. **Arjan Durrresi**
Hot Topics in Networking

2. **Milena Lazarova**
Intelligent Imaging and Vision Based Applications

12:30 – 13:30 Lunch Break

Tuesday, September 8th, 2015

13:30 – 15:30

SECTION 1

COMPUTER SYSTEMS AND NETWORKS

Conference Hall 1

Chairs: ***Genti Daci***

Valentin Mollov

1. Development of IPTV System Through Tvheadend®
Vladimir Dimitrov and Daniel Nedytkov
2. Protection of Network and Information Security for European Consumers by Directive Requirements for Telecommunication Operators
Roumen Trifonov, Georgi Popov and Sergey Nedev
3. USB Flash Memory Research – Transfer Rate Dependency on Operating System
Sergey Nedev and Vladimir Kamenov
4. Climatic Factors Influence Research on Optical CD-Rs
Sergey Nedev and Vladimir Kamenov
5. Design and Optimization of FSM Projects Using Xilinx StateCAD Environment
Valentin Mollov
6. Time Dependence of Human Skin Impedance Spectra due to Gel Penetration
Valentin Mollov and Drjan Martinsen
7. Virtual Laboratory for HPC Applications Development on Tileria Processors
Simeon Tsvetanov and Teodora Kireva
8. Analysis And Security Assessment of CIS Infrastructure
Elior Vila and Harri Rrapaj
9. Hardening Security of Enterprise Network Services
Elior Vila and Harri Rrapaj

13:30 – 15:30

SECTION 2

SOFTWARE SYSTEMS AND METHODOLOGIES

Conference Hall 2

Chairs: ***Betim Cico***

Adelina Aleksieva-Petrova

1. Computer Generation of Artificial Strong Ground Motion Accelerograms Based on the Wavelet Algorithm
Ivaylo Zhekov and Guergana Mollova
2. Energy Efficiency Combined SW Techniques on Android OS
Luan Ruçi, Luan Karçanaj and Olimpjon Shurdi
3. Personalize Web Searching Strategies Classification and Comparison
Maria Evtimova and Ivan Momtchev
4. Analysis and Design of AIS based on REA Accounting Model
Rexhina Blloshmi and Igli Hakrama
5. Search Method of Semantic Web Services Based on Dijkstra's Algorithm
Adelina Aleksieva-Petrova, Milen Petrov and Desislav Atanasov
6. Algorithms for Building Extended Galois Field and Calculations in it
Antoniya Tasheva and Zhaneta Tasheva

15:30 – 15:45 Coffee Break

Tuesday, September 8th, 2015

15:45 – 17:45

SECTION 3

INFORMATION MANAGEMENT AND TECHNOLOGIES

Conference Hall 1

Chairs: ***Rexhep Rada***
Daniela Minkovska

1. Providing a Solution to Speed up Generation of Reports in an Environment with a lot of Data Processing
Arbër Perçuku, Daniela Minkovska and Lyudmila Stoyanova
2. Task-based Asynchronous Pattern with async and await
Mariana Garanova, Elena Kalcheva-Yovkova and Stanimir Penkov
3. Methods for Integration of the Virtual Reality Technology in Modern Approaches for E-learning
Daniela Minkovska
4. A Service Oriented Architecture System for Tests Generation
Lyudmila Stoyanova
5. Autonomous Mapping Robotic System Based on a Wireless Communication Architecture
Eva Cipi and Betim Cico
6. An Android-based Application for Mining Customer Satisfaction
Albi Dode and Erind Bedalli
7. Centralized System Security in Albanian Government
Mirlinda Karçanaj, Blerina Pirani and Rexhep Rada
8. Coordinating Service Resources: An Architecture for REST Service Collaboration
Agon Memeti, Besnik Seljimi, Adrian Besimi and Betim Cico

15:45 – 17:30

SECTION 4

COMPUTATIONAL INTELLIGENCE

Conference Hall 2

Chairs: ***Marenglen Biba***
Milena Lazarova

1. Chemotaxis Differential Evolution Optimization Algorithm: Comparative Study on Mutation Strategies
Yunus Emre Yildiz, Oğuz Altun Altun and Ali Osman Topal
2. Empirical Study of Dynamic Virtual Bats Algorithm (DVBA)
Ali Osman Topal, Oğuz Altun and Yunus Emre Yildiz
3. Optimization and Scaling of Multiple Sequence Alignment Software ClustalW on Hybrid Massively Parallel System
Plamenka Borovska and Veska Gancheva
4. Optimization Strategies for Economic and Financial Analysis
Milena Lazarova and Aylya Ahmedova
5. Visual Cryptography for Information Protection
Milena Lazarova
6. Enhancing Part-of-Speech Tagging in Albanian with Machine Learning on Large Tagsets
Marenglen Biba and Elvin Salavaci
7. A Machine Learning Model for Parsing in Albanian
Marenglen Biba and Julian Kamberi

Wednesday, September 9th, 2015

09:00 – 11:00

**SECTION 5
GRID AND CLOUD COMPUTING & PHD SECTION
*Conference Hall 1***

Chairs: ***Neki Frasher***
Petko Stoyanov

1. (Micro) Grid of functional controllers, integrated into a Cloud-based building management system
Ivaylo Simeonov, Krassimir Stoyanov and Varbinka Stefanova-Stoyanova
2. Cloud Storage Integration Platform
Simeon Tsvetanov and Igljka Doundakova
3. DDCMCC - Distributed Data Consistency Management in Cloud Computers
Artur Koçi and Betim Çiço
4. Current Segmentation Algorithms for Abdominal CT Images
Elena Kalcheva Yovkova and Mariana Goranova
5. An Approach for Automatic Rib Cage Segmentation and Evaluation from Axial CT Images
Elena Kalcheva Yovkova and Mariana Goranova
6. Iris Recognition by 1D Fourier Transform
Oktay Koc and Arban Uka
7. Agent Communication Languages Comparison: FIPA-ACL and KQML
Georgi Tsochev, Roumen Trifonov and Georgi Naydenov
8. Technical parameters Integration of Mechanical and Computer Systems in Robotics
Galia Pavlova, Veselin Pavlov and Roumen Trifonov

11:00 – 11:15

Coffee Break

11:15 – 13:15

SECTION 6 PHD AND STUDENTS' SECTION

Conference Hall 1

Chairs: *Erind Bedalli*

Mariana Goranova

1. Combining the Procedural and the Set-Based Approaches in the Teaching of SQL SELECT Statements in the Introductory Databases Course
Philip Petrov and Daniel Djolev
2. Effective Architecture of an Enterprise Data Warehouse for Orders and Order Transactions Management
Ivan Stankov and Aleksandar Andonov
3. Integrating LMS in Teaching and Learning Process in State University of Tetovo: Issues and Challenges
Gazmend Khaferi, Rovena Bahiti and Florinda Imeri
4. Optimization and Management of Parking in Public Garages and Parking Lots Using Ontologies
Lyubomir Lakov
5. The Command of Irobot Create Using BASIC4ANDROID
Genti Progri, Entela Progri and Petrika Marango
6. Application off Graph theory to AD-HOC Networks
Besjana Tosuni
7. Agents Control Knowledge in eLearning Systems
Naoum Zilas, Sofoklis Christoforidis, Vasiliki Georgaki, Stefanos Gaumas, Anna Thisiadou, Christos Duvlos
8. Intelligent Agents make Intelligent Power System
Sofoklis Christoforidis, George Christoforidis, Dimasthenis Pappas
9. Improving the Clinical Laboratory in Hospital Information Systems
Vasiliki Georgaki, Naoum Zilas, Dimitrios Thomopoulos, Sofoklis Christoforidis

SECTION 7 VIRTUAL SESSION

Available at:

<http://cs.tu-sofia.bg/conf/virtual>

1. Fault Tolerance in Cloud Technologies Presented as a Service
Nina Sinyagina and Pavel Dzhunev
2. Performance Evaluation and Benchmarking of Modern GPU Architectures
Desislava Ivanova, Vladimir Kadurin and Yanko Belov
3. A New Method of Defining Objects of Interest and 3D Visualization in FOTOM-NG System
Daniela Gotseva, Lachezar Lichev, Jakub Hendrych, Radim Kunchicky and Karolina Feberova
4. Experimental Studies on the Acquisition of 3D Information Using 2D Images Captured by a Moving Digital Still Camera
Iva Nikolova
5. Automatic White Balance Algorithms – a New Methodology for Objective Evaluation
Georgi Zapryanov
6. Approach for Mapping Ontologies to Relational Databases
Anna Rozeva

Wednesday, September 9th, 2015

14:00 – 18:00
Social Event

19:30 Official Dinner

Closing Ceremony & Best paper awards

Hotel Restorant Vila Belvedere