Technical University of Sofia
Faculty of Computer Systems and Control

University of Elbasan "Aleksandër Xhuvani"
Informatics Department

PROGRAM

7th International Scientific Conference
COMPUTER SCIENCE '2015
08-10 September 2015, Durres, Albania
CONFERENCE CHAIRS

Plamenka Borovska,
Technical University of Sofia, Bulgaria

Elior Vila,
University of Elbasan “Aleksander Xhuvani”, Albania

VICE CHAIRS

Ognian Nakov,
Technical University of Sofia, Bulgaria

Liman Varoshi,
University of Elbasan “Aleksander Xhuvani”, Albania

INTERNATIONAL ORGANIZING COMMITTEE

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INTERNATIONAL PROGRAM COMMITTEE

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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 Durresi
   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 Nedylkov
2. Protection of Network and Information Security for European Consumers by Directive Requirements for Telecommunication Operators
   Roumen Trifanov, 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 Orjan Martinsen
7. Virtual Laboratory for HPC Applications Development on Tilera 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 Goranova, 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
   Mirlinda KarÇanaj, Blerina Pirani and Rexhep Rada
   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 Frasheri
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 Ilika Doundakova

3. DDCMCC - Distributed Data Consistency Management in Cloud Computers
   Artur Koçi and Betim Çigo

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 I

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 Xhafeti, Rovena Bahiti and Florinda Imeci

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 Prapi, Entela Prapi and Petrika Marango

6. Application of Graph theory to AD-HOC Networks
   Besjana Tosuni

7. Agents Control Knowledge in eLearning Systems
   Naoum Zilas, Sofoklis Christoforidis, Vasiliki Georgaki, Stefanos Goumas, Anna Thisiadou, Christos Duvlas

8. Intelligent Agents make Intelligent Power System
   Sofoklis Christoforidis, George Christoforidis, Dimosthenis 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 Goteva, 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