

4th Conference on Informatics and Information Technology – *CiiT 2003*

11 -14 of December, 2003, Hotel “Molika” - Bitola

Schedule of presentations

Session 1: *CiiT PS1 - Plenary session: 80 min (2*(35+5))*

Friday 9:00 Hall A, Chairman: M.Gusev

Opening ceremony

1. C. Moraga: An Engineering View of Fuzzy Logic
2. V. Milutinovic: Semantic Web

Session 2: *CiiT PS2 - Plenary session: 80 min (2*(35+5))*

Saturday 9:00 Hall A, Chairman: S.Markovski

3. R. Drechsler, A. Breiter: Hardware Project Management - What we Can Learn from the Software Development Process for Hardware Design?
4. W. Gander: Fitting Data by Least Squares – Algorithms and Examples

Session 3: *CiiT PS3 - Plenary session: 60 min (2*(25+5))*

Friday 19:40 Hall A, Chairman: Z.Popeska

5. Z. Konjović, D. Surla: An Overview of the Development of the Library Information System Bisis
6. M. Stojcev, T. Tokic, I. Milentijevic: The limits of semiconductor technology and coming challenges in microarchitecture and architecture

Session 4: *CiiT PS4 - Plenary session: 75 min (3*(20+5))*

Saturday 19:40 Hall A, Chairman: K.Zdravkova

7. V. Filkov: Heterogeneous Data Integration and Top-down Modeling of Gene Regulation
8. D.Rainys, A.Bielko, A.Cenys: Enhancing IDS - Honeypot Systems
9. V. Milutinovic: How to publish IEEE paper

Session 5: CiiT PCA - Parallel Comp. Architectures -80 min (4*(15+5))

Friday 10:40 Hall B, Chairman: I.Milentijevic

10. J. Markovski, M. Gušev: Comparative Analysis of Value Predictors
11. B. Jakmovski, M. Gušev: Improving the performance in the Computational Grid
12. B. Randjelovic, I. Milovanovic, E. Milovanovic, M. Stojcev: Multiplication of Rectangular Matrices on Linear Bidirectional Systolic Arrays
13. I. Milentijevic, V. Ciric: Synthesis of Coefficient Bit Reordering Module for Folded Bit-Plane Arrays

Session 6: CiiT NET - Computer networks - 60 min (3*(15+5))

Friday 12:20 Hall B, Chairman: T. Janevski

14. A. Kalejska, O. Popov: Management Issues in Wireless and Mobile Networks
15. B. Stojcevska, O. Popov: A Loss Pair Approach towards Congestion Management
16. T. Janevski: Modeling and Management of Traffic In Wireless IP Networks

Session 7: CiiT WEB - WEB technologies - 60 min (4*(13+2))

Friday 15:00 Hall B, Chairman: D. Stojanovic

17. B. Predic, D. Stojanovic: XML Technologies in Web Based Geographic Information Systems
18. N. Naumov, S. Loskovska: An Efficient WEB Site
19. M. Jovanov: Some Security Issues When Using PHP
20. A. Stanimirovic, D. Stojanovic, L. Stoimenov: Extending Web Information Systems with Web Notification Service

Session 8: CiiT EL1 - E-Learning 1 - 60 min (4*(13+2))

Friday 16:20 Hall B, Chairman: K.Georgouli

21. S. Stoyanov, E. Doychev, M. Trendafilova, I. Ganchev: eJCSE – eLearning Module in Software Engineering
22. A. Kadriu: Multimedia Learning and its Role in Education
23. I. Founta: Integrated Technical Support for the Primary and Secondary Schools in Greece
24. K. Georgouli, G. Krika, M. Georgantopoulou: An Authoring Agent for Supporting WEB-Based Tutoring

Session 9: CiiT MWT –Mobile Wireless Technologies-80min(4*(15+5))

Saturday 10:40 Hall B, Chairman: L.Gavrilovska

25. Z. Dimitrovski, L. Gavrilovska: QOS Evaluation of EDCF Medium Access Scheme
26. K. Comu, L. Gavrilovska: Comparison of Internet Traffic Models: On-Off Self Similar Model versus Fractional Gaussian Noise Model
27. Lj. Antovski, M. Gusev: Wireless and Mobile Services
28. L. Gavrilovska: Wireless Evolution Towards 4G

Session 10: CiiT ADH - AD Hoc Computer networks -60 min (3*(15+5))**Saturday 12:20 Hall B, Chairman: A.Grnarov**

- 29. D. Trajanov, S. Filiposka, J. Makraduli, A. Grnarov: Spatial Parameters and Connection Availability in AD Hoc Networks
- 30. D. Trajanov, B. Mickova, S. Filiposka, A. Grnarov: TOPOSIM: Wireless AD Hoc Network Topology Simulator
- 31. S. Filiposka, I. Trendafilova, D. Trajanov, A. Grnarov: AD Hoc Network Simulators Features

Session 11: CiiT EL2 - E-Learning 2 - 60 min (4*(13+2))**Saturday 15:00 Hall B, Chairman: S.Stojanov**

- 32. K. Zdravkova: Educational Software for Children with Cerebral Palsy (a case study)
- 33. M. Gusev, A. Misev, G. Armenksi, G. Stojcevska, S. Ivanovska, J. Bogojeska: Interactive Learning System
- 34. S. Arsenovski, I. Kraljevski, M. Mihajlov, I. Jolevski: Evaluation of SCORM Based Learning System
- 35. S. Stojanov, I. Ganchev, M. O'Droma: Adaptation of the DeLC Architecture to the SCORM standard

Session 12: CiiT EB - E-Business - 60 min (4*(13+2))**Saturday 16:20 Hall B, Chairman: M.Gusev**

- 36. K. Mitreski, S. Stevkovski: WEB-Based Mobile Service For Pollution Monitoring Systems
- 37. G.Manceski, P.Mitrevski: A Model and SW Solution for Determining Economic Indicators for Construction, Exploitation And Maintenance Of a Traffic Road Section
- 38. M. Kon Popovska, V. Ajanovski, A. Misev: Survey of the e-Business opportunities in Macedonia
- 39. G. Armenksi, M. Gusev: Paperless Office

Session 13: CiiT PRG - Programming – 80 min (4*(15+5))**Friday 10:40 Hall C, Chairman: D.Surla**

- 40. M. Sterjev: JNDI JAAS Password Authentication
- 41. M. Sterjev, J. Stojanovski: MJAAS: Method Level Java Authentication and Authorization Service
- 42. S. Stankovic, B. Predic: Performance Improvement of Image Processing Software Applied to Photomosaic Creation Software
- 43. M. Zarić, D. Surla: Java Implementation of the Protocol for Metadata Harvesting

Session 14: CiiT ITM - IT Tools for Mathematics - 60 min (4*(13+2))

Friday 12:20 Hall C, Chairman: S.Markov

- 44. S. Markov: Computation with Zonotopes using Matlab
- 45. E. Popova: Communication Chain C-XSC, Mathematica, WEB
- 46. M. Mihova, V. Dimitrova: Functions in Mathematica for solving and plotting Equalities, Inequalities and System of Inequalities
- 47. S. Lazarova-Molnar, G. Horton: Proxel-Based Simulation

Session 15: CiiT DL1 - Digital Libraries 1 - 60 min (3*(15+5))

Friday 15:00 Hall C, Chairman: D.Surla

- 48. D. Okanović, B. Milosavljević: Digital Library of Theses and Dissertations - Data Model
- 49. G. Sladić, S. Komazec: Modeling and Implementation of Entity Beans in Software System for Networked Digital Library of Theses and Dissertations
- 50. Z. Protić, D. Okanović: Modeling and Implementation of the JSP pages in the System Digital Library of Theses and Dissertations

Session 16: CiiT TB1 -Theoretical background of IT 1 -60min(4*(13+2))

Friday 16:20 Hall C, Chairman: D.Gligoroski

- 51. S. Markovski, V. Bakeva: A Class Of Error-Detecting Codes Based On A Quasigroup Operation
- 52. L. Goračinova-Ilieva, S. Markovski: Steiner Systems and Quasigroups
- 53. V. Dimitrova, J. Markovski: Improving existing PRSG using QSP
- 54. D. Gligoroski: Quasigroup Cipher Simulators

Session 17: CiiT IS - Information systems - 80 min (4*(15+5))

Friday 17:40 Hall C, Chairman: M.Kon-Popovska

- 55. V. Kurbalija, M. Ivanovic: CBG – A Framework for Intelligent Decision Support Systems
- 56. V. Ajanovski: Rule-Based Information System for Insurance Premium Calculation
- 57. P. Rajković, D. Janković: Upgrading Health Care Information System
- 58. V. Pachovski, M. Kon-Popovska: Semi-automatic Document Processing in an Experimental Model of Information Retrieval System

Session 18: CiiT SE - Software engineering - 80 min (4*(15+5))

Saturday 10:40 Hall C, Chairman: A. Stoyanova-Doycheva

- 59. B. Markoski, P. Hotomski, D. Malbaški: Dijkstra's Approach to Solving a Problem of Program Correctness
- 60. S. Grceva: An Efficient Software Process Self-Assessment Methodology
- 61. S. Grceva: Software Quality Management through Implementation of Software Standards
- 62. A. Stoyanova-Doycheva: A Software Refactoring Process And The Supported Tools

Session 19: *CiiT AI1 - Artificial Intelligence 1 - 60 min (3*(15+5))***Saturday 12:20 Hall C, Chairman: C.Mitrovski**

- 63. N. Ackovska, G. Jovancevski, S. Bozinovski: Production Systems of the Biological Cell
- 64. A. Markoski, B. Samakovski, Z.Sokoloski, Z.Petreski, K.Mrkeski: PC-Based CNC System for Robotic Filament Winding
- 65. C. Mitrovski, M. Kostov: Radionuclide Spreading Direction Depended Adaptive Filtering Of Nuclear Medicine Images

Session 20: *CiiT DL2 - Digital Libraries 2 - 60 min (3*(15+5))***Saturday 15:00 Hall C, Chairman: Z. Konjović**

- 66. S. Komazec, G. Sladić: Design Patterns in Implementation of Digital Library of Theses and Dissertations
- 67. M. Vidaković, Z. Konjović: One Implementation of Virtual Library Based on Agent Technology
- 68. B. Milosavljević, Z. Konjović: Multimedia Document Retrieval In The Networked Digital Library Of Theses And Dissertations

Session 21: *CiiT AI2 - Artificial Intelligence 2 - 60 min (3*(15+5))***Saturday 16:20 Hall C, Chairman: K.Zdravkova**

- 69. D. Ulbikiene, J. Ulbikas, L. Leonas: Simulation of Artificial Systems Behaviour in Parametric Eight-Dimensional Space
- 70. A. Madevska-Bogdanova: Bioinformatics – the Machine Learning approach
- 71. A. Popovska, K. Zdravkova: Representation of Macedonian Grammar with AND/OR Graphs

Session 22: *CiiT TB2 - Theoretical background of IT 2-75min(5*(13+2))***Saturday 17:40 Hall C, Chairman: D.Vandev**

- 72. P. Stanimirovic, P. Krtolica, N. Karampetakis: Using the Interpolation in Computing Generalized Inverses of a Polynomial Matrix
- 73. M. Mihova, Ž. Popeska: Reliability functions For Multi-State systems with equal graduate failures
- 74. S. Andova: Verification of probabilistic systems - Concurrent Alternating Bit Protocol
- 75. V. Manevska, D. Dimovski: Fully Commutative (3,2)-Automata
- 76. D. Vandev: Stochastic Optimization in Robust Statistic

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Workshop “Tools for CS education”

Session 23: Workshop - Internet & Information Systems - 60min (4*15)

Thursday 17:40 Hall B, Chairman: S. Djordjevic-Kajan

- 77. M. Petkovic, M. Rajkovic: Framework for Virtual Web Laboratories Implementation
- 78. M. Stankovic, M. Jovanovic: Java Technologies for Internet Programming
- 79. M. Tasic, V. Milicevic: Social Networking in the University Education Process
- 80. S. Djordjevic-Kajan, A. Stanimirovic, A. Dimitrujevic: Supporting Students Learning Databases: Experiences with Students' Projects

Session 24: Workshop - Computational Intelligence - 60min (4*15)

Thursday 19:00 Hall B, Chairman: C. Moraga

- 81. K. Georgouli: An Adaptive Hypermedia Systems
- 82. V. Ajanovski: IS Course Case study: Wireless Campus Portal
- 83. N. Ackovska: Distance Learning Robotics
- 84. C. Moraga: Outline of a Course on Computational Intelligence

Session 25: Workshop - CS education - 30 min (2*15)

Informatics and Information Systems

Friday 17:40 Hall B, Chairman: R.Drechsler

- 85. I. Milovanovic, B. Randjelovic, E. Milovanovic: Discrete Mathematics in CS Education at Faculty of electronic Engineering
- 86. R. Drechsler: Educational Software for Computer Engineering: A Case Study of an Interactive BDD Tool

Session 26: Workshop – Round Table “Current trends in implementing new curricula and ECTS in CS” - 90 min (6*15)

Friday 18:10 Hall B, Chairman: M.Gusev

- 87. C. Moraga: CS at University of Dortmund
- 88. R. Drechsler: CS at University of Bremen
- 89. K. Georgouli: CS at TEI Athens
- 90. I. Milovanovic: CS at University of Nis
- 91. V. Radevski: CS at SEE University Tetovo
- 92. P. Mitrevski: CS at St. Clement Ohridski University, Bitola
- 93. A. Grnarov: CS at Sts. Cyril and Methodius University, ETF Skopje
- 94. M. Gusev: CS at Sts. Cyril and Methodius University, PMF Skopje

Session 27: Workshop - Simulators - 60 min (4*15)

Saturday 17:40 Hall B, Chairman: I.Milentijevic

- 95. I. Founta: Tools for Networking Technology Courses
- 96. B. Jakimovski, M. Gusev: Grid Communication Simulator
- 97. J. Markovski, A. Misev, M. Gusev: Simulator Tools for CA Courses
- 98. T. Tokic, I. Milentijevic: Microcontrollers: Teaching and Simulators

Session 28: Workshop - Lab Practicing - 60 min (4*15)

Saturday 18:40 Hall B, Chairman: M.Stojcev

- 99. R. Stankovic, D. Jankovic, C. Moraga: Internet Oriented Realization of Logic Design Labs
- 100. M. Stojcev, T. Stankovic, P. Krtolica: Lab Practicing in Studying the Assembly Languages and Computer Architecture
- 101. G. Jovanovic: Using PSpice in Lab Practicing for Analog ASIC Design
- 102. T. Stankovic, G. Djordjevic, M. Stojcev: Lab Practicing in Design of FSM with Concurrent Error Detection

	Hall B		Hall C	
Time	Friday	Saturday	Friday	Saturday
08:00	<i>Breakfast</i>			
09:00	Plenary Session – Hall B			
10:20	<i>Coffee break</i>			
10:40	PCA	MWT	PRG	SE
12:00	<i>Coffee break</i>			
12:20	NET	ADH	ITM	AI1
13:20	<i>Lunch</i>			
15:00	WEB	EL2	DL1	DL2
16:00	<i>Coffee break</i>			
16:20	EL1	EB	TB1	AI2
17:20	<i>Coffee break</i>			
17:40	<i>Workshop</i>		IS	TB2
19:30	Plenary session – Hall B			
21:00	<i>Dinner</i>			

	Hall B			Hall C	
Time	Thursday	Friday	Saturday	Friday	Saturday
10:40		PCA	MWT	PRG	SE
12:20		NET	ADH	ITM	AI1
15:00		WEB	EL2	DL1	DL2
16:20		EL1	EBS	TB1	AI2
17:40	<i>Tempus CD16160 Workshop</i>			IS	TB2

Time	Hall A - Friday / Saturday
08:00	<i>Breakfast</i>
09:00	Plenary Session
10:20	<i>Coffee break</i>
13:20	<i>Lunch</i>
19:40	Invited talks
21:00	<i>Dinner</i>

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Global schedule of presentations

PS - Plenary sessions Friday & Saturday 9:00, 19:40 Hall A
PCA - Parallel Comp. Architectures - Friday 10:40 Hall B
NET - Computer networks - Friday 12:20 Hall B
WEB - WEB technologies - Friday 15:00 Hall B
EL1 - E-Learning 1 - Friday 16:20 Hall B
MWT – Mobile Wireless Technologies - Saturday 10:40 Hall B
ADH - AD Hoc Computer networks - Saturday 12:20 Hall B
EL2 - E-Learning 2 - Saturday 15:00 Hall B
EB - E-Business - Saturday 16:20 Hall B
PRG - Programming – Friday 10:40 Hall C
ITM - IT Tools for Mathematics - Friday 12:20 Hall C
DL1 - Digital Libraries 1 - Friday 15:00 Hall C
TB1 -Theoretical background of IT 1 - Friday 16:20 Hall C
IS - Information systems - Friday 17:40 Hall C
SE - Software engineering - Saturday 10:40 Hall C
AI1 - Artificial Intelligence 1 - Saturday 12:20 Hall C
DL2 - Digital Libraries 2 - Saturday 15:00 Hall C
AI2 - Artificial Intelligence 2 - Saturday 16:20 Hall C
TB2 - Theoretical background of IT 2 - Saturday 17:40 Hall C