WELCOME CompSysTech'2003 ORGANIZATION PREFACE

PLENARY SESSION

P.1. K. Boyanov, John Atanasoff Inventor of the First Electronic Digital Computer P.2. G. Totkov, Virtual Learning Environments: Towards Next Generation

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I.1. Ahmed Abdo Ali, Security Design for a New Local Area Network AULWLAN

I.2. E. Fomina, A. Keevallik, M. Kruus, A. Sudnitson, A Decomposition Procedure for Register-Transfer Level Power Management

I.3. S. Ivanov, Solid State Disk Architecture on the Basis of FRAM

I.4. R. Romansky, Y. Lazarov, Selective Stack Prefetch Method

I.5. R. Ivanov, Automatic GPS-based Vehicle Tracking and Localization Information System

I.6. I. Simeonov, Monitoring of the Change of the Level of Liquids and Other Materials

I.7. P. Petkov, R. Fileva, S. Panchev, E. Yonchev, Microprocessor Control of Uninterruptible Power Supplies for Responsible Loads

I.8. P. Petkov, R. Fileva, S. Panchev, E. Yonchev, Microprocessor System for Analysis, Diagnostics and Supervision of Non-stationary Work Regimes of Batteries Including in UPS

I.9. B. Ribov, G. Spasov, CCK Encoding with PIC Based Microcontrollers for the RF Wireless Communications

I.10. N. Bencheva, V. Tsonev, Y. Ruseva, Using the MSSP Module of PIC16F87X Microcontroller in Master Mode for I²C Communications

SESSION II Computer Technologies

II.1. V. Boeva, A Model Logic Based Approach to Schema Integration

II.2. B. Alexandrov, M. Angelov, Protecting Information by Means of the Remainders Theorem

II.3. N. Maneva, An Approach to Usability Assurance

II.4. K. Grigorova, Process Modelling using Petri Nets

II.5. I. Mihaylov, P. Ivanov, E. Stefanova, A. Eskenazi, S. Ilieva, The Expert Approach – a Case Study

II.6. E. Zaharieva-Stoyanova, L. Jäntschi, Application of Software Data Dependency Detection Algorithm in Superscalar Computer Architecture

II.7. Z. Covacheva, Data Warehouse Architecture on the Basis of Dimensional Modelling

II.8. I. Stoyanov, St. Bonev, Resolving Non-Determinism in NFA

II.9. B. Rachev, D. Ilieva, An Approach for Texture SDI Visualization

II.10. S. Petrov, Monitoring MPLS VPNs

II.11. G. Istatkova, Object-Oriented Scientific Visualization

II.12. J. Georgieva, V. Gancheva, Functional Testing of Object-Oriented Software

II.13. S. Arsov, B. Rachev, An Approach to Design of the Object-Oriented Databases with Natural Language Access

II.14. A. Rozeva, Index Structure for the Fact Table of a Star-Joint Scheme and Template Query Processing

II.15. K. Shverthner, Rapid Application Development (RAD) and Deployment Using ORACLE

II.16. M. Marinov, D. Radev, An Implementation of a Multimedia Object-Oriented Database Management System

II.17. I. Atanasov, Representation of Structures with Multiple Inheritances in Relational Databases

II.18. V. Iltchev, Bottom-up Method for Processing Recursive Sets of Rules

II.19. Y. Kiryakov, J. Galletly, Aspect-Oriented Programming – Case Study Experiences

II.20. A. Krastev, J. Galletly, Do We Really Need EJB

II.21. D. Staneva, E. Atanasov, Using Tcl Mobile Agents for Monitoring Distributed Computations

II.22. G. Bogdanova, T. Todorov, D. Blagoev, M. Todorova, Use of Dynamic Technologies for WEB-enabled Database Management Systems

II.23. S. Andonova, B. Bontchev, Web Project Tracker

II.24. T. Stojanova, Lossless Compression Algorithm for High Entropy Data

II.25. P. Bakalov, A Model of an Offline Replication System

II.26. D. Gotseva, MS Word Macro Language Extension

II.27. J. Zlateva, G. Todorov, BAM Neural Network Simulator

II.28. I. Valova, B. Rachev, Image Databases - An Approach to Image Segmentation & Color Reduction Analysis & Synthesis

II.29. K. Koroutchev, Jose R. Dorronsoro, Statistics of Natural Images Using Hash Fractal Image Compression

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III.18. M. Todorova, B. Boyanov, Genetic Algorithm Based Identification of Linear Distributed Parameter Systems by Finite Difference Technique

III.19. V. Markova, Appliance of Fuzzy Logic in Agent Knowledge Base

III.20. P. Goranov, Guidelines for Building CAD models in a Distributed Environment

III.21. J. Vasilev, G. Georgiev, Tendencies in the Development of EPR Systems

III.22. L. Kraev, Automated Economic Data Processing in the Changing Business World

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III.25. A. Kemalov, User-level DMA extension for NOW/ cluster Architectures

III.26. E. Ivanova, SOAP Based Multiple Search

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IIIA.3. P. Dobrikov, P. Nakov, The Architecture of a Corporate Information and News Engine

IIIA.4. T. Stoilov, V. Ivanova, Portfolio Optimization of Investment Decisions on The Securities Market in Bulgaria

IIIA.5. Y. Pavlov, K. Liakova, Machine Learning and Expert Utility Assessment

IIIA.6. A. Sarkisyan, N. Marinova, Intellectual and Knowledge Based Assets of the Organizations and Contemporary Technologies for Their Management

IIIA.7. A. Papavasileiou, E. Gegov, Application of the Theory of Systems and Artificial Intelligence for the Purposes of Computer Design

IIIA.8. G. Atanasova, P. Hristova, Flow Chart Interpreter – an environment for animated representation of algorithms

IIIA.9. Z. Georgiev, Test software for outlining of vehicle dynamic characteristics

IIIA.10. K. Gabrovska, N. Mihailov, Software system for calculation and analysis of electrical power, derived from renewable energy sources

IIIA.11. G. Mazadjiev Computer Simulation of a Relative Shifting of Object Guidance Sighting Equipment Scales with Board Electro Motion

IIIA.12. G. S. Georgiev, G. T. Georgiev, S. Stefanova, Some Approaches for Handling Multi-user Access to Instruments in a Virtual Lab

IIIA.13. V. Dochev, T. Vassilev, Efficient Super-Elasticity Handling in Mass-Spring Systems

IIIA.14. C. Golemanov, E. Golemanova, ERP-module for Computer Catalogue Automatic Generation.

IIIA.15. N. Takuchev, Computer Automation of Spectrophotometric and Colorimetric Measurements

IIIA.16. T. Stoilov, K. Stoilova, Network of e-Services

IIIA.17. H. Tujarov, M. Stefanova, H. Moneva, Presentation of a Web site using the Systematic approach

IIIA.18. H. Tujarov, I. Mihailov, Open system for the development of software manuals

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IIIA.20. G. Nenova, Type Decisions for Development of Information Systems from Users

IIIA.21. K. Trichkov, Distributed Search in Heterogeneous Databases (repositories) System in Global Network Using Z39.50 standard

IIIA.22. D. Atanasova, An Information system for electrode selection for steel welding

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IV.2. J. Jablonowski, Some Experiences in Teaching Teamwork Programming

IV.3. D. Gray, Anonymous Coursework Submission

IV.4. A. Matthiasdottir, M. Dal, S. Lefever, How do teachers use information and communication technology in Icelandic high school in 2002

IV.5. G. Boaz, On the Use of PKI Technologies for Secure and Private E-learning Environments

IV.6. M. Esteves, A. Mendes, OOP-Anim, a system to support learning of basic object oriented programming Concepts

IV.7. P.Caballero-Gil, C. Bruno-Castañeda, C. Hernández-Goya, the Teaching of Cryptologic Mathematics

IV.8. C. Albertas, O. Vasilecas, Development of Modern Curriculum in Information Systems at Master Level

IV.9. V. Kolovski, J. Galletly, Towards E-learning via the Semantic Web

IV.10. G. Trajkovski, D. Davani, T. Georgiev, Preparing to Teach Undergraduate Robotics On-Ground and On-Line

IV.11. I. Georgiev, Teaching Multimedia – from Multimedia Signals, Audio and Visual Processing, to Multimedia Networks

IV.12. I. Chakarova, G. Totkov, On Transferring of Traditional Learning Materials into Virtual Learning Environment

IV.13. I. Nemigenchev, D. Girginov, C. Hinov, I. Aylov, D. Orlinov, Technology of developing computer-based training and information system "LOGITRON"

IV.14. G.Tuparov, D. Dureva, R. Bratanov, M. Dimitrov, A Web - based Model of System for Development and Delivering of On-line Courses

IV.15. L. Yordanova, G. Boychev, Y. Tsvetanova, V. Hrisuleva, G. Kiryakova, Development of a Web-based Course on Informatics via Open-source Software Package MOODLE

IV.16. I. Hristov, Requirements for WEB Based Courseware delivery System

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IV.18. L. Vladinova, M. Petrov, T. Iliev, Assessing Students' Performance in Distance Education Courses

IV.19. L. Vladinova, A. Minchev, K. Stefanov, Distance Education Standards and Legal Issues – Computing Education Perspective

IV.20. K. Stefanov, Computing Ontology Creation

IV.21. D. Tsvetkov, L. Christov, Computer Implementation of MMLE/EM Algorithm for Two-Parametric Logistic Model

IV.22. N. Takuchev, Application of the Computer as Measuring Instrument in Sociometry for Revealing the Social-Psychological Factors, Influencing the Educational Effectiveness

IV.23. L. Nikolov, Teaching Operating Systems at the Technical University-Sofia

IV.24. T. Stoyanov, P. Dicheva, An Integrated Digital Environment Enhancing Medical Learning

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IV.27. M.Todorova, V. Petrova, Learning Objects

IV.28. M. Andreeva, A language for Testing Programs

IV.29. G. Georgieva, G. Todorov, A. Smrikarov, A model of a virtual university - some problems during its development

IV.31. A. Vasileva, A. Smrikarov, ATraining Software Model of an Interrupt System

IV.32. R. Ilieva, High-tech Educational Approaches in Economics and Automation

IV.33. V. Stoffa, Computer-aided learning of programming