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ROMANIAN-AMERICAN UNIVERSITY
FACULTY OF COMPUTER SCIENCE
FOR BUSINESS MANAGEMENT



The 1st International Conference
“Economics and Information Technology-
e-Society Knowledge and Innovation”



Conference Program

26 - 27 september

Organized with the support of **ANCS**



About The Romanian -American University



Ion SMEDESCU Ph.D., Founding President

The **Romanian-American University** is part of the **Romanian-American Foundation for the Promotion of Education and Culture**, having as a purpose the promotion of the educational values of the American high education on the background of the rich traditions of the Romanian education which are internationally recognized.

Within the context of the University reform and of Romania's integration process in the European Union, the introduction of the European dimension, matching of the curricula, the compliance with the European standards, promotion of the academic performance criteria internationally recognized, the interuniversity cooperation, academic mobility and the recognition of the studies and diplomas are among the **strategic objectives** of the Romanian-American University.

We have taken important steps that have allowed us to present a different type of educational offer on the market of educational services, by adopting a system based on two levels: license and master.

I want all our students and teaching staff to be proud of being part of the academic community of the Romanian-American University, and our graduates to contribute, through integrity and professional competence, to the development of the prestige of our institution in our country and abroad.

SECTION 4 Digital Finance, Banking and Management: Methodologies and Technologies

Chair:

prof. univ. dr. Maria Moise

prof. univ. dr. Virgil Chichernea

1. A. Altăr – **Robust Monetary Policy**
2. L. C. G. Budacia, E. A. Budacia – **Techniques for audit assisted by computer**
3. M. Coancă – **Persuasive Communication in Business**
4. C. Mihălcescu, B. Ciolacu, F. Pavel, C. Titrade – **Risk and Innovation in e-Banking**
5. M. Preda – **“Global” Diversity Management: The Case of Automobile Manufacturing Companies in Japan**
6. M. Preda – **Globalization and the Rise of Multinational Corporations**
7. G. Săvoiu, I. Iorga-Simăn – **Sociophysics: A New Science or a New Domain for Physicists in a Modern University?**
8. G. Săvoiu, I. Iorga-Simăn – **Some Relevant Econophysics' Moments of History, Definitions, Methods, Models and New Trends**
9. F. Măgureanu, G. Măgureanu – **Information Technology Applications in the Judiciary Evidence System**
10. P. van der Hoek – **Corruption and Taxation in the New European Union Member States**

SECTION 3

Modeling and Simulation

Chair:

conf. dr. Cezar Botezatu
conf. dr. Daniela Crisan

1. M. E. Ciortea – **Petri Net Based Approaches to Manufacturing Systems**
2. C. Coculescu – **Mathematic Modeling and Its Role in Operational Research**
3. C. Coculescu – **Features Concerning Competitive Performance Measurement**
4. L. V. Constantin - **Physics-an efficient solution for an extremely important problem of now days: electric energy**
5. L. V. Constantin - **The study of the light interference with the aide of the digital technology**
6. M. Gruiescu, O. E. Dobre - **The Hachemeister's Algorithm for Heterogenous Portofolios**
7. O. Solomon, C. Pricină – **Time Delays and the Underwriting Cycle**
8. M. Zaharia, I. Zaheu, E. R. Stan – **The Evolution of SNP Petrom Stock List – Study Through Autoregressive Models**
9. M. Botezatu – **Models for Labor Force Analysis**

About The Faculty of Computer Science for Business Management



From the beginning 1991, its educational plans, its analytical programs and the whole educational and scientific research system were permanently updated in compliance with the IT society and the job market requirement in Romania and the developed countries.

Which are the Faculty of Computer Science for Business Management strong points by comparison with other economic faculties?

In the certainty of finding a job on the work market, there is an obvious request for specialists in the IT domain, request that will continue in the future;

In the recognition on the international market: through the acquired skills and knowledge, the faculty graduates can target the working offer in the IT domain at companies all over the country and occidental countries, as well as in foreign companies established in our country;

In the actual relation with the practice and the current and future requirements from an IT specialist in economic applications domain;

The subjects of study taught at this faculty target the most dynamic sector of economic IT, generally and of managerial IT especially giving to the future graduates the opportunity to participate in a direct way to the economy restructuration, the reform and European integration and North-Atlantic structure. The knowledge acquired facilitates the economic phenomena and interpretation and optimization processes, insuring the needed training to elaborate studies and forecasts concerning the real economy.

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SECTION 2
Business Software Applications

Chair:

conf. dr. George Caruțașu
conf. dr. Costel Emil Coteț

1. V. Chichernea – **The Application of Computational Management Game Metodology to Graduate Business Education**
2. S. M. Ilie, C.V. Turcas - **Study Hydrocarbons Using the Technology On-line**
3. S. M. Ilie, C. Pavel - **E-Learning Platform - The Dynamics of Mills Used in the Construction Materials Industry**
4. S. M. Ilie, A. Neacșu - **E-Learning Techniques for Presenting Courses - Romanit a Distinct Species of Amber**
5. A. Lado – **Asynchronous E-learning**
6. C. Mihălcescu, D. Firoiu – **Virtual Education**
7. M. Moraru – **E-Commerce**
8. A. Pârjan, D.M. Petrosanu - **A Comparison of the Most Popular Electronic Micropayment Systems**
9. A. Pârjan, D.M. Petrosanu - **Dematerialized Monies – New Means of Payment**
10. A. M. Tudorache - **Data mining and the process of taking decisions in e-business**
11. A. Velicanu - **Integrating CRM software applications**
12. V. Vladucu – **ERP (Enterprise Resource Planning)**
13. A.Preda, D.A. Crisan, L.J. Stanica, A.N. Altar Samuel - **Implementing e-Learning in the Romanian Educational System – A Priority in the Context of EU Integration**
14. C.L. Popa, L.F. Parpală - **Validating Cooperative Systems Simulation and Remodeling for Pump Cover Design and Manufacturing in a Virtual Enterprise**
15. G.S. Drăgoi, C.R. Parpală, C.E. Coteț, G. Pătrașcu - **A Business Process Management Approach in Virtual Enterprise Networks**
16. G.B. Nica, R.C. Parpală - **Using CPI Relevant Profiles in the Human Resources Management for the Multifunctional Enterprises Arhitectures**

SECTION 1

Information Technology

Chair:

prof. univ. dr. Cornelia Paulina Botezatu
prof. univ. dr. Ion Lungu

1. C. Bârcă, C. Bârcă – **Introduction in RDS System**
2. L. Bornaz – **Data Indexing Algorithms**
3. C. Botezatu, C. Bârcă – **Intelligent Vehicle Safety Systems- eCall**
4. L. C. G. Budacia, E. A. Budacia – **Business versus Electronic Business**
5. C. P. Botezatu, G. Căruțașu – **Strategies on Software Integration**
6. B. Crenguța – **Concern-oriented and Ontology-based Modular Architectural Design of Software Systems**
7. V. Diaconița, I. Lungu - **TCP/IP XML Solution**
8. A. Enăceanu - **SEO Techniques for Business Websites**
9. G. Garais - **Manual and Automated Content Interlinking in a dynamic webpage**
10. F. D. Grafu, C. Leovaridis - **Innovative solutions for implementation of new types of organizations in Intelligent Transport Systems**
11. I. Iacob – **UML 2.0 Notation for Modeling Real Time Task Scheduling**
12. I. Iacob – **Extreme Programming and Rational Unified Process – Contrasts or Synonyms?**
13. A. C. Joița – **Introduction to Adobe Air**
14. A. C. Joița – **Introduction to Adobe Flex**
15. G. Marin – **Decision Support Systems**
16. D. Pop – **Introducing Microsoft Silverlight**
17. D. Pop – **Introduction to ZEND Framework**
18. S. M. Roșu, M. Guran - **Ten Steps to Increase the Knowledge for an Efficient Management of the Intellectual Capital in the Enterprise Business Intelligence**
19. E. D. Seleşchi – **Medical Image Processing using MATLAB**
20. E. D. Seleşchi – **Brain Imaging Software**

EDITOR'S NOTE:

This collection of papers constitutes the proceedings of the 1st International Conference on Applied Informatics in Economy and Information Technology held in Bucharest, Romania during the 26-27th September 2008 and organized by The Romanian-American University in Bucharest with the support of ANCS. The conference is hosted in the campus of the Romanian-American University.

The scope of the conference covers the following topics: information and communication technologies; e-learning; decision support systems; virtual organizations; database management systems; system design methods, techniques and tools; client-server applications; distributed applications; design standards; new requirements in system design; new forms of business and management systems; automated data processing security; Internet and services.

All papers were accepted and published in this book, after a severe peer-review process. The papers cover a broad spectrum of Information Technology topics and are organized in four main streams.

The Scientific Committee gratefully acknowledges all authors who submitted papers for their efforts.

We would like to thank the members of the Scientific Committee, the additional reviewers and members of the Organizing Committee for their work and support.

We would like to express our gratitude for their support to:

- ? MICROSOFT Romania, Microsoft | Innovation Center
- ? NOVENSYS
- ? INFORTIS – Center of Research, Consultancy and Training in Economic Informatics and Information Technology, Romanian-American University
- ? CCTIC&IA – Center of Research in Information, Communication and Artificial Intelligence Technology, Romanian-American University
- ? PREMINV – Center of Research, Consultancy and Training for Virtual Industrial Enterprises Management, University Politehnica of Bucharest

Conference Program

Day 1

9.30 - 10.00	Registration
10.00 - 11.30	Plenary Session
11.30 - 11.45	Coffee Break
11.45 - 13.15	Plenary Session
13.15 - 14.00	Lunch Break
14.00 - 15.30	Section Sessions
15.30 - 15.45	Coffee Break
15.45 - 17.00	Section Sessions

Day 2

9.30 - 11.00	Discussions based on the presented papers
11.00 - 11.15	Coffee Break
11.15 - 13.00	Conclusions, evaluation, proposals

Scientific Committee

President: Ion Smedescu, prof.univ.dr.,RAU Rector

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Prof. dr. Maria Moise, RAU
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Alin-Cristian Joița, prep.univ., RAU-member
Marin Georgiana, prep.univ., RAU-member

Invited Papers

1. F. O. Bîlbîie - **Delegating Optimal Monetary Policy Inertia: Inflation, Output Gap Growth or Nominal Income Growth Targeting?**
2. G. Căruțașu, Cornelia Botezatu, Cezar Botezatu - **Triangle of innovation in IT industry**
3. V. Chichernea – **Competitive Advantage by Integrated ERP-Adonis in Master Programmes Curricula**
4. L. Evans, A. Nicolae – **The Output Effect of Stopping Inflation when Velocity is Time Varying**
5. M. Moise, V. Popa - **Types of methods and researches used in e-government systems/applications**
6. A. Preda, A. Preda – **Business Intelligence Challenge**
7. I. Roșu – **Liquidity and Information in Order Driven Markets**
8. A. Spiru – **Inflation Convergence in Central and Eastern European Economies**
9. C. Cotet – **Discrete Material Flow Management in Industrial Engineering**