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The **JOURNAL OF INFORMATION SYSTEMS & OPERATION MANAGEMENT (ISSN 1843-4711),** published two times annually by the Romanian American University, is the specialized in IT domains. The articles published, apply to the scientists, researchers and users of IT (field), interested in enlarging the knowledge horizon with specialty notions, new work papers and reference studies, to apply in their own field. Thought the presentation of some scientific paper works and IT&C culture promotion, necessary for a functional market economy, the review intends to be a favorable space for debates and a challenge at the same time. Any study or opinion that can contribute to the development of the understanding degree of the IT&C as a science is welcome. JISOM encourages cross-disciplinary research work of Romanian and foreign scholars.

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    - Abstract
    - Keywords 5 – 8

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COGNITIVE TOOLS FOR GAME WORLD DESIGNERS

Alessandro Canossa [*]

Abstract
What is exactly level design? It is juggling 12 balls in the air at the same time, it is solving differential equations with 12 variables, it is trying to realize a vision when everybody is tearing at it. Artists, programmers, marketing PRs, scripters, designers. People from very different backgrounds and with even more varying motivations converge with their vital contributions and it is up to the level designer to manage all of these different issues and create a memorable playing experience. It is not a mystery that the role and tasks of a level designer are the most difficult to describe in a few words. Paraphrasing Elvis Costello "talking about level design is like dancing about architecture". And yet a sentence that I hear confirmed more and more every day is: "Level designers create experiences by providing spaces for players to act." Players act in a space that causes experience to emerge and this experience affects the players, closing the magic circle (see figure 1).

Keywords
Game worlds, level design, aesthetics, ludology, phenomenology, engagement, Flow, Play-modes, Emot-emes, Play-personas.

CLOVER: MOBILE STUDENT COMMUNITY ON SQUACE

*Gayane Azizyan**
Aron Henriksson
Miganoush Katrin Magarian Kenaraki
Andrei Neculau [*]

Abstract
Azizyan, Gayane. Henriksson, Aron. Magarian Kenaraki, Miganoush Katrin. Neculau, Andrei. 2009. Mobile Student Community on Squace. Pages 12
Keywords: project report, mobile, bookmarking, student community, integration

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PATHS IN VIRTUAL SPACES: DESIGNED AND PERCEIVED

Dana Maria Popa [*]

The present goal and effort of this thesis is part of a larger forthcoming investigation of the reciprocal influence between architecture and computer games fields. Given the fact that few analytical research investigations have been done on the structure of spatiality in computer games, this paper will examine a finer detail of this topic: paths. The literature on paths is vast in fields such as space planning, but there are limited approaches that study and analyze this particular topic in computer games. Even though the resulting research risks being too specific, it will hopefully provide useful details for works on the broader topic of spatiality in computer games. In addition, this study it will prove the importance of this spatial element for better observing cognitive player behavior, and will provide valuable knowledge to level designers, in particular, for maps and environment virtual space planning.

IT GOVERNANCE AND BUSINESS CORPORATE STRATEGY – EMBEDDING THE PROGRAM AND PROJECT MANAGEMENT WITH IT&C VALUE CHAIN

Mihail Sădeanu[*]

Abstract: This second part continues the principles of the IT value chain based on projects and programs together with the organizational value of the last ones, presented in the first part of the paper. It details the IT value chain based on operations, the strategic-factors of success and the services delivery chain, the value chain management and the contribution measurement to the organizational business, with a final presentation of practical applicability for the mobile value chain to the 3G mobile communication services. Recent IT&C and corporate strategic management field references bring an additional support to the paper value.

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SPLIT INFINITIVES IN PROLOG

Aron Henriksson
Andrei Neculau[*]

Abstract
Henriksson, Aron. Neculau, Andrei. 2009. Split Infinitives in Prolog. Pages 3. Appendix A.
Keywords: split infinitives, logic programming, prolog

THE EXECUTIVE SUPPORT SYSTEMS AS INNOVATIVE TOOLS FOR THE EVALUATION OF FINANCIAL PROJECTS

Virgil Chichernea, PhD[*]

Abstract

ESS and ISS as part of DSS have a positive impact both on company's performances and its collaboration with its partners. In order to evaluate the performance of economic enterprises SITIRATING package, one should deal with and make : the Evaluation of the company's development trend, the Evaluation of the Financial Capacity, the Evaluation of the resources' administration(financial, human), Risks evaluation (Operational, Financial, of Credit), the Calculation of the discount coefficient for the debt on the secondary debt market, Rating reports simulation; the Prognosis simulation regarding the business plan, Written reports and graphs resulted from the analysis of the company's financial records or the studied activity sector.

KEY WORDS:

Decision Support Systems(DSS); Executive Information Systems (EIS); Executive Support Systems(ESS); Rating; SITIRATING Package, Portal technology;

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INITIAL VALUE PROBLEMS FOR NONLINEAR DIFFERENTIAL EQUATIONS SOLVED BY DIFFERENTIAL TRANSFORM METHOD. II

Mircea Cîrnu
Flavia-Dalia Frumosu[*]

ABSTRACT
In the paper [2] we presented how can solve initial value problems for non-linear differential equations using the differential transform. We did this by solving in a rigorous way, based on mathematically induction, an example taken from the paper [3]. Here present the same for another example taken from the paper [3]. In [3] and also in [6] and respective [4], these examples was solved as boundary value problems. The chosen example is proved to have an exact solution. A Maple program is also included.

Keywords: Nonlinear differential equations, initial value problems, differential transform method.
2000 Mathematics Subject Classification: 34A25, 65L05

ESTIMATING SPURIOUS POWER WHILE MAPPING *K*-LUT-BASED FPGA CIRCUITS

Ion Bucur
Nicolae Cupcea
Adrian Surpateanu
Cornel Popescu[*]

Abstract
In this paper is presented a new approach for decreasing the spurious power consumption in K-LUT based FPGA implemented circuits. The approach is based on selective collapsing nodes in a direct acyclic graph (DAG) representing combinational or synchronous sequential circuits. It was used the simulation-based approach that estimates, using Monte Carlo experiment, the spurious switching activity of each net in the circuit. Traversing circuits in topological order, step by step best K-feasible cone are computed at the output of each node. Preserving the best depth of the circuits the mapping stage is done searching to minimize spurious switching power.
Keywords: *spurious switching power, K-feasible cones, optimum depth, optimal area and power.*

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AN INTRODUCTION TO CUDA PROGRAMMING

Irina Mocanu[*]

Abstract. The graphics boards have become so powerful that they are usded for mathematical computations, such as matrix multiplication and transposition, which are required for complex visual and physics simulations in computer games. NVIDIA has supported this trend by releasing the **CUDA** (Compute Unified Device Architecture) interface library to allow applications developers to write code that can be uploaded into an NVIDIA-based card for execution by NVIDIA's massively parallel GPUs. This paper is an introduction to the CUDA programming based on the documentation from [2] and [4].

USERS SATISFACTION - A DYNAMIC WEB APPLICATIONS MAINTENANCE CRITERION

Gabriel Eugen Garais[*]

Abstract: User satisfaction is a measurable web page indicator by following the various sub-indicators that can give important information for further development of a web page.

Keywords: user satisfaction, web page maintenance.

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A LOOK AT INTEL'S NEW NEHALEM ARCHITECTURE: THE BLOOMFIELD AND LYNNFIELD FAMILIES AND THE NEW TURBO BOOST TECHNOLOGY

Dragos-Paul Pop [*]

Keywords: Intel, Nehalem, Bloomfield, Lynnfield, CPU, Turbo Boost, HyperThreading, PCIe, transistor, QPI, core, thread, overclock

Nehalem is the codename for the Intel processor microarchitecture successor to the Core microarchitecture. The first processor released with the Nehalem architecture is the desktop Core i7, which was released in November 2008.

Nehalem processors use the same 45 nm manufacturing methods as Penryn. A working system with two Nehalem processors was shown at Intel Developer Forum Fall 2007, and a large number of Nehalem systems were shown at Computex in June 2008.

INTEGRATED JAVA TECHNOLGIES IN ON-LINE STORE DEVELOPMENT

Ciprian Băcilă
Ovidiu Vereş [*]

Abstract: In developing an on-line store it is vital that we use an application which can offer maximum efficiency regardless of the platform it uses. The applications developed for this purpose have to be as robust as possible, providing the clients with access anywhere and the site administrators with the possibility to monitor continuously the changes in the data base. This article presents the means of obtaining such an application which can be easily adapted to all needs.

Keywords: business layer, servlet, Java beans, JavaServer pages (JSP), Java database connectivity (JDBC)

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COSTUMER BEHAVIOR METRICS IN DATABASE MARKETING

Cristina Romanciuc[*]

Abstract:
Data gathering and processing is very important for every business. Database and especially, Database Marketing is an instrument which is gaining more and more territory. This instrument is used in different fields of economy, but especially in marketing, playing an important role in processing data about costumers. Areas such as costumer behavior and customer relationship are strongly related to database marketing. Two types of model can be used for determining consumer behavior: descriptive model and predictive model.

Keywords: CRM, Data, Database marketing, Consumer behavior, Descriptive model, Predictive model.

eCall – MINIMUM SET OF DATA (MSD)

Claudiu-Dan Bârcă
Rareş Ropot
Sorin Dumitrescu[*]

Abstract
The introduction and use of in-vehicle eCall for deployment of emergency assistance will save lives and reduce social burden by improving the notification of road accidents and speeding up emergency service response.

This articles describes the specifies of an emergency message (minimum set of data - MSD) that is sent to to the most appropriate emergency response center – Public Safety Answering Point (PSAP), as defined by the relevant public authorities. The mobile network operator forwards the call to the PSAP where the operator can analyze the data on a display so that he will be able to determine which emergency services are needed at the scene.

Key words: *eCall, minimum set of data, intelligent transport systems*

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E-COMMERCE

Mihai Moraru [*]

ABSTRACT

E-commerce (Electronic Commerce or EC) is the buying and selling of goods and services on the Internet, especially the World Wide Web. In practice, this term and a newer term, e-business is often used interchangeably. For online retail selling, the term e-tailing sometimes used.

THE QM SOFTWARE PACKAGE-THE TRANSPORTATION PROGRAMME

Tatiana Pâslariu [*]

Abstract

QM software package represents a business instrument for the underlying of management or marketing decisions.

This software package is used to solve many classes of problems, among which one can enumerate the transportation problem, that can be solved with the Transportation programme. The main objective of this programme's usage is to optimize the total transportation costs. This programme is the best choice in the case of important problems whose solving is difficult by means of traditional methods, thus eliminating an extremely laborious stage and implicitly exposed to error risks, the results being obtained much faster.

Key Words

QM, transportation, optimization, costs, sources, suppliers, destinations, beneficiaries.

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DOCUMENT WORKFLOW MANAGEMENT IN CENTRAL ADMINISTRATION

Ciprian Gheorghe[*]

Abstract
This paper present how IT can provide help to central administration entities with document workflow by moving the accent from paper to digital format. We discuss a case study at former Ministry of Economy and Commerce (MEC) and an software implementation provided by SoftMentor.

Keywords: document, workflow, retrieval, registration

QUALITY MODEL FOR COMPARATIVE ANALYSIS OF WEBSITES DEDICATED TO E-COMMERCE APPLICATIONS

Sacara Nadejda[*]

Abstract

The main objective of the study is to develop a hierarchy of a number of sites dedicated to electronic commerce applications according to a quality model.

The big number of sites for electronic commerce has led naturally to a strong competition between them and automatically to an evolution of quality characteristics. Thus the software quality domain imposes naturally in production of web applications. Later were established quality models and quality standards.

To assess a site in terms of quality first is created a quality model. A quality model contains a set of characteristics that are evaluated according to metrics.

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