ABSTRACT
FUNDAMENTAL AND COMPLEMENTARY SCIENCE

CARMEN ASTRATINEI
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E-LEARNING MARITIME ENGLISH COURSE-FINAL RESULTS AFTER PILOTING STAGE

***Abstract**: The shipping industry has become more and more demanding as far as the General and Maritime English are concerned. This is due to the fact that most merchant ships are owned by foreign companies and manned by multinational crews who need to be competent to communicate in English orally and in writing. In this respect, the IMO (International Maritime Organization) and the STCW'95 (Standards of Training Certification and Watch-keeping) convention and code imposed a number of requirements regarding the seafarers' Maritime English knowledge and adequate use. As a result of the international maritime bodies' requirements, the SMCP (Standard Marine Communication Phrases) has become mandatory for the shipping industry worldwide. The SMCP is a comprehensive standardized safety language, precise, concise, simple and unambiguous so as to avoid confusion and error. It consists of a set of terms, definitions, phrases used on board ships, for ship-to-ship and ship-to-shore communication. Therefore, the MET (Maritime Education and Training) teachers have to meet the challenge of designing attractive and efficient courses to motivate their students. It seems that on-line courses are becoming more and more popular with the 21st century students. Last year we piloted the first year deck cadet on-line course. We will present in this paper the final results and considerations after analyzing the students' feed-back commentaries and suggestions. In a learner-centered type of education, the students' involvement in teaching/learning materials development as well as in course design is a must. In this way, the learners become more responsible for the act of learning, more enthusiastic and more determined to achieve success.*

ALINA BALAGIU, DANA ZECHIA
Naval Academy, Constanta, Romania

ENGLISH INFLUENCE UPON ROMANIAN MARINE (ENGINEERING) TERMINOLOGY

***Abstract**: The paper tries to identify the main changes produced upon the Romanian terminology by the English marine terms which are more and more frequently used in maritime vocabulary in general and especially in certain sub-domains like engineering. The fact that most of our graduates work on ships, in an international environment make these changes more rapid and spectacular in comparison to the influences upon the same terminology in the last century.*

MARCELINO BELECCIU, CAMELIA CIOBANU, IRINA CRISTEA
Coast Guard-Romanian Border Police' Naval Academy, Constanta**,** University of Nova Gorica, Slovenia

HOW TO USE THE ORDINARY MATHEMATICAL MODELS IN THE MILITARY FIELD

***Abstract:** This article's aim is to provide quick solutions in the case of military operations, more precisely it will be emphasized the fact that we can use mathematical algorithms of graph theory to determine the optimal length of roads in a mission. Specifically, the Elementary Algorithm (of Bellman) in the area of military operations in Iraq is used to determine the shortest route between two cities, Al Faw (a port situated in the south of Iraq) and Dahuk (in the north part of the country), through the capital, Baghdad. This is necessary for transporting troops and military equipment in specific areas. To achieve this, the map of Iraq is figured as a graph, the targeted cities are the vertices of the graph and are named as numbers (from 1 to 28), and distances between cities are the arcs of the graph (values, capacities – in this case are kilometers). The distances between cities and the country map are updated.*

GHEORGHE CALCAN
Petroleum-Gas University of Ploiești, Ploiești, Romania

THE ORGANIZATION OF THE THIRD INTERNATIONAL PETROLEUM CONGRESS IN BUCHAREST, 1907

***Abstract:** The history of this congress began in 1900, when in Paris there was organized the first International Petroleum Congress. Due to the success registered by the Romanian delegation there, it was decided that the second congress to be held in Romania. The idea was welcome in the oil field, but politicians were rather reserved. In 1903, the political circles refused organizing the congress. As a result, the second International Petroleum Congress was held in 1905 in Belgium. The performance of the Romanian delegation was also excellent, so it was decided that the next congress to be held in Romania. If in 1906 the preparations went rather slowly, at the beginning of 1907 they accelerated.*

The Programme of the Congress (August 22 - September 2 1907) was complex and included both scientific papers and documentary visits, as the ones to the city of Constanţa, to Constanţa port and to oil facilities in the area. The Romanian Maritime Service also provided the opportunity for the participants to visit Constantinople. It was an exceptional event at which 30 nations were represented.

OZANA CIOCA
„Alexandru Ioan Cuza" University, Iaşi, Romania

CONSIDERATIONS REGARDING THE CURRENT MARITIME JOURNALISTIC DISCOURSE IN ROMANIAN AND ITALIAN

Abstract: *The paper comparatively presents the lexical, morphological, syntactic and pragmatic-rhetoric peculiarities in the current maritime journalistic discourse. The subject of our analysis is a series of articles in Marina Română and Marea Noastră magazines, for the specialized journals in Romanian and Rivista Marittima and Lega Navale, their Italian counterparts.*

ANA MARIA COBZARU
MAGISTRA, Romania

CHEMICAL AND STRUCTURAL CHARACTERIZATION OF $ZN_{2-X}NI_XSIO_4$ (X=0.5) SOLID SOLUTIONS TYPE SYNTHESIZED BY TWO UNCONVENTIONAL METHODS (SOL-GEL METHOD AND PECHINI METHOD)

Abstract: *$Zn_{2-x}Ni_xSiO_4$ (x=0.5) nano-particles were successfully synthesized at a low temperature of 900°C both by Pechini method and sol-gel method with starting materials of $Zn(CH_3COO)_2{\cdot}2H_2O$, $Ni(CH_3COO)_2{\cdot}4H_2O$ and $Si(OCH_2CH_3)_4$.*
The structural characterization of the precursors and derived synthesized oxide powders is done by X-raydiffraction (XRD), Fourier transform infrared spectroscopy (FTIR), thermal analysis(TG-DTG) and electron microscopy (SEM, EDX and TEM) studies.
The effect of heat-treating temperature on the crystallinity of the$Zn_{2-x}Ni_xSiO_4$ (x=0.5) was investigated.
Combined the XRD data and the strong FTIR peaks assigned to Zn-O and Si-O vibration, indicate the formation of $Zn_{2-x}Ni_xSiO_4$ phase at a temperature of 900°C.
Also the nano-crystals size distribution for sol-gel process was studied and the main diameter of nanoparticles was about 11 nm.

VASILE PREDA, VERONICA CORNACIU
University of Bucharest, Bucharest, Romania, University Titu Maiorescu, Bucharest, Romania

$(h,\varphi)-$OPTIMALITY CONDITIONS FOR LOCALLY LIPSCHITZ GENERALIZED B-VEX SEMI-INFINITE PROGRAMMING

Abstract: *In this paper, by using $(h,\varphi)-$ generalized directional derivative and $(h,\varphi)-$ generalized gradient, the class of B-vex, (ρ,B,η)-invex, pseudo (B,η)-invex, and quasi (B,η)-invex functions for differentiable functions is extended to the class of generalized $(h,\varphi)-$ B-vex, $(h,\varphi)-(\rho,B,\eta)-$invex, pseudo $(h,\varphi)-(B,\eta)-$invex, and quasi $(h,\varphi)-(B,\eta)-$invex functions for locally Lipschitz functions. The sufficient optimality conditions are obtained for semi-infinite programming problems which involving those functions.*

VLAD-MIHAI COTENESCU
Military Technical Academy, Bucharest, Romania

PEOPLE, PROCESS, AND TECHNOLOGY; A BLEND TO INCREASE AN ORGANIZATION SECURITY POSTURE

Abstract: *Few would argue that enterprises have increasingly become dependent on IT to facilitate business operations. In today's knowledge-driven economy, information is critical to an enterprise's ability not only to survive but also to thrive. Experienced business leaders know that information deserves at least the same level of protection as any other asset, and have made information security managers a common addition to the organization chart.*
Organizations lose proprietary information daily due to hackers, insiders, or business partners. Most organizations think that this issue isbeing addressed with technology alone, but that is not realistic. This article will try to demonstrate that focusing holistically on people, processes, andtechnology can reduce the impact of data loss. People can be trained to recognize threats such asphishing and social engineering. Processes can address the issue through policies and procedures.Technology can be implemented to monitor and prevent attacks against the environment.

VLAD-MIHAI COTENESCU
Military Technical Academy, Bucharest, Romania

SIEM (SECURITY INFORMATION AND EVENT MANAGEMENT SOLUTIONS) IMPLEMENTATIONS IN PRIVATE OR PUBLIC CLOUDS

Abstract: *The underlying principle of a* ***SIEM*** *system is that relevant data about an enterprise's security is produced in multiple locations and being able to look at all the data from a single point of view makes it easier to spot trends and see patterns that are out of the ordinary.*
Today's security threats are dynamic in nature and exploits are constantly evolving. Attackers grow more organized, precise and persistent and have access to various automated tools that can trigger very sophisticated attacks. As ***threats****and security events evolve, SIEM vendors and the information securitycommunity must work together to build relevant and actionable businessanalytics into their systems. By continuously improving recommendationsand the controls to support those recommendations, SIEM products canbecome true information security hubs that not only automate audits butalso provide proactive means to protect the organization. SIEMtechnologies for* ***centralization*** *and consolidation of an organization'ssecurity data will continue to be important investments for organizationswanting to accurately* ***respond*** *to threats and ultimately improve their riskand compliance postures.*
In the field of computer security, security information and event management (SIEM) software products and services combine security information management (SIM) and security event management (SEM). They provide real-time analysis of ***security alerts*** *generated by network hardware and applications.*

LAURENTIU ALEXANDRU DUMITRU, SERGIU EFTIMIE, DAN FOSTEA
Military Technical Academy, Bucharest, Romania

AN FPGA-BASED CLOUD STORAGE GATEWAY

Abstract: *Cloud storage solutions are known for their scalability, stability and easy integration. However, many companies choose classical, self-maintained storage because it can be directly controlled, in terms of physical security. With the overall long-term cost in mind, the balance shifts in favor of storage as a service, provided by a cloud infrastructure. In order to meet the security requirements of sensitive data, a gateway that bridges a company's internal storage endpoints with an external resource provider can solve the security issues. This device would be able to interact with existing interfaces and provide a controlled link with remote cloud storage services. The paper proposes such a solution, based on FPGA technology, that will provide seamless access and encryption for data that is stored off-premises.*

LAURENTIU ALEXANDRU DUMITRU, STEFANIA LOREDANA NITA
Military Technical Academy, Bucharest, Romania, Integrated Systems Department, Institute for Computers, Bucharest, Romania

AUTOMATED FPGA FIRMWARE MANAGEMENT IN HPC CLUSTERS

Abstract*: FPGA-based accelerators are increasingly deployed on cluster and grid systems due to their highly flexible architecture. Given the generic nature of a high performance computing system, the firmware and software running on the FPGAs changes dynamically, according to the specifications requested by the launched application. Along with performance monitoring, this reconfiguration process can be automated in order to decrease idle-times on computing nodes and to have a centralized view of the system. Such an architecture would be centered around a client-server model in which the computing nodes run the client component, along with the batch agent. The server component would be located anywhere in the cluster as long as it has the appropriate permission to interact with the batch server. The paper explores the possibility of integrating this reconfiguration model with an existing batch system, without major changes in the way users operate the cluster.*

SERGIU EFTIMIE, VIOLETA OPRIS
Military Technical Academy, Bucharest, Romania

SECURITY CONCERNS ON THE ADOPTION OF SOFTWARE CONTAINERS

Abstract: *In this paper we provide an overview of the present security concerns on the adoption of software containers by enterprise organizations. The proven benefits of containers such as application scalability and faster time to market can be overshadowed by security issues. Although the container design is considered secure, the detection and mitigation of vulnerabilities should be part of a strong security strategy in the development of an application.*

SERGIU EFTIMIE, CIPRIAN RACUCIU
Military Technical Academy, Bucharest, Romania

HONEYPOT SYSTEM BASED ON SOFTWARE CONTAINERS

Abstract: *In this paper we explore aspects of building a honeypot system using software containers. Despite their advantages, organizations see honeypots as too complex from a deployment and management perspective. As software containers gain popularity these issues can be addressed using light containers hosted on cloud infrastructures.*

ALEXANDRU GEORGESCU, ULPIA-ELENA BOTEZATU, ŞTEFAN-CIPRIAN ARSENI, ALEXANDRU BARBU, LIDIA BOIANGIU
EURISC Foundation, Bucharest, Romanian, Space Agency, Bucharest, Military Equipment and Technologies Research Agency, Bucharest

DELIBERATE THREATS TO CRITICAL SPACE INFRASTRUCTURE – ASAT AND THE STRATEGIC CONTEXT

Abstract: *Space systems are critical enablers of a wide range of applications utilized by a global range of consumers. The provision of critical space services is vulnerable to, among other things, deliberate interruptions through anti-satellite weaponry and means. The intrinsic characteristics of space systems make them both very efficient and very hard to replace, such as limited weight, the high cost of replacement and the low number of assets. Deliberate human threats to space critical infrastructures are many, varied and highly efficient, stemming also from legitimate technologies for protection that can be modified to become efficient anti-satellite weapons. In addition to the technical details, a few issues stand out. The first is that deliberately targeting satellites lends itself to a form of MAD logic (mutually assured destruction), which limits the willingness of states to do it for fear of reprisal or being themselves affected, due to interdependencies. The second is that certain forms of anti-satellite weaponry have become accessible to non-state actors, who do not respond to traditional deterrence and for whom jamming, cyber-attacks and other forms of weaponry are cost effective and efficient means of incurring huge damage with no immediate loss of life (which is an important political consideration). The third is that vulnerability also extends to military users, whose systems should, theoretically, be better shielded, more resilient and afforded more redundancy. In practice, those systems are not enough and, in the case of the US, more than 90% of military communications are routed through civilian systems. This has given rise to interesting new approaches and insights towards US vulnerability, highlighted by a number of high profile military exercises. Now, the US military speaks of "fog of electrons", space as an Achilles' heel, critical dependence of drones and smart weaponry on space infrastructures, the equalizing effect of space system targeting on American military superiority etc. These trends are also important for other countries to note.*

EDITH-HILDE KAITER
Naval Academy Constanta, Romania

GLOBALIZATION, MODERN TERRORISM AND MEDIA

Abstract: *Modern technology has provided small terrorist groups with a powerful "instrument" - mass media - which willingly or unwillingly serves their needs. As it is more and more believed, the terrorist acts by themselves wouldn't have this impact if it weren't for publicity. Several terrorist organizations realized the potentials of media-oriented terror, in terms of effectively reaching huge audiences. Media seems to promote their deeds efficiently. The impact across media reveals interesting similarities and differences: both press and television led to image changes and heightened the importance attributed to the issue. Press reports were found to be somewhat more effective in forming attitudes and perceptions than television, while exposure to television coverage was more effective in encouraging interpersonal communication. Several differences may be explained by the different functions of each medium, the audience's needs directed to each medium, and the different format and content of presentation in each medium.*
The paper deals with the effectiveness or non-effectiveness of media under different circumstances such as war, crisis and terror.

DELIA LUNGU, LAURA CIZER
Naval Academy, Constanta, Romania

PRACTICE DOESN'T MAKE PERFECT; PERFECT PRACTICE MAKES PERFECT

Abstract. *Much has been discusses about the importance of writing a lesson plan; nevertheless, this topic will never be obsolete and good teachers will always consider the subject as an important issue in their teaching career. There are teachers who believe that writing a lesson plan is important just for young teachers who need to have a clear idea about what they are going to do in class, while writing a lesson plan*

by experienced teachers is a waste of time as they already have taught the subject lots of times and know exactly what they have to do about any topic. It has also been stated that not all planned lessons are excellent ones and not all unplanned lessons are a disaster, but even a bad lesson will be less bad if planned, and even a great lesson can be greater with a plan.
The aim of this paper is to discuss the importance of writing lesson plans by analyzing the benefits of a good lesson plan and their impact on teachers' development. The topic is also part of a series of sessions presented in teacher training seminars in which the authors have participated as trainers.

MIRCEA LUPU, GHEORGHE RADU, CRISTIAN-GEORGE CONSTANTINESCU
"Transilvania" University of Brasov, Romania, "Henri Coanda" Air Force Academy, Brasov, Romania
AUTOMATIC REGULATION AND OPTIMAL CONTROL REGARDING FLUVIAL OR SPATIAL NAVES EQUILIBRIUM STABILIZATION
Abstract: *The first part of the paper deals with cruise, cargo or underwater naves equilibrium stabilization in case of rolling perturbations. The stabilization conditions are determined by using a hydro-pneumatic automate regulator. Oscillations damping is achieved with a hydro-pneumatic compensator, by using the water tanks that the naves are equipped with.*
The second part of the paper deals with automatic stabilization of rockets, submarines or satellites dynamics. This stabilization is based on relay-type automatic regulators, by using the minimal time criterion for optimal control with the Pontreagiune extremal principle. In this study, the state variables are the rotation angles and the control function has 2 components, which are appearing because of lateral rolling perturbations. Finaly, numeric-analytical l studies are approached, and the results are graphically presented.

RARES MANIU
Military Technical Academy, Bucharest, Romania
GENETIC GENERATION OF INTERNET OF THINGS OVERLAY NETWORK INFRASTRUCTURE
Abstract*: The Internet of Things now represents one of the biggest technology wave in information and communication technology domain. In such a network, the communication parameters are critical and, for improving its potential, the utilization of an overlay network infrastructure is the clue. This paper proposes a genetic generation of such a network topology, based on existent parameters of communication infrastructure and taking in consideration the quality of services demands.*

RALUCA APOSTOL-MATES, ALINA BARBU
Naval Academy, Constanta, Romania, Constanta Maritime University, Romania
HUMAN ERROR-THE MAIN FACTOR IN MARINE ACCIDENTS
Abstract: *Modern ships are equipped with technologically advanced systems that are presumably infallible. Marine accidents still occur, and the number of casualties is alarmingly high. Not even the state of the art systems used to improve the new ships' operation have reduced the number of incidents and accidents at sea. The main factor that induces the present situation is the human factor. Not being a machine, a human cannot be programmed to follow the perfect path in every situation. Moreover, taking into consideration the variety of elements able to interfere with human work onboard the ship, it is practically impossible to have a rule or regulation for each state that can occur. The present paper highlights the importance of human error in the maritime field and underlines problems related to the maritime crew.*

MARIANA MEZEI, SILVIA TEODORESCU, AURA BOTA
National University of Physical Education and Sports, Bucharest, Romania
STUDY ON THE PERCEPTION OF ATHLETES IN THE NATIONAL AEROBIC GYMNASTICS TEAM ABOUT THE EXECUTION OF TECHNICAL DIFFICULTY ELEMENTS
Abstract: *Aerobic gymnastics, as a sports branch that highlights the practitioner's complex behavior, creates a wide field of investigation which associates both objective and subjective aspects. This study aims to identify the subjective echo of learning and executing technical elements over the performers, namely their perception about how they are aware of the movement and control it, and also how perception is influenced by variables such as age, gender, sports experience and performance level. To this purpose, a 21-item opinion questionnaire was developed and applied to a number of 25 subjects, members of the national aerobic gymnastics team of Romania.*
The study has practical valences, meaning that the information collected from questionnaire was used to design a programme for correcting typical execution mistakes according to the gymnasts' individual particularities. The obtained results imperatively require to approach in preparation some sequences/time for

reflection, during which the repeated elements should be brought to discussion by the coach, each athlete providing feedback as regards the psychological pattern used, sensations felt, individual predictive aspects.

MARIUS IULIAN MIHAILESCU, ADRIAN BETERINGHE, VIOLETA OPRIS
Department of IT&C, LUMINA – The University of South-East Europe, Military Technical Academy
ENHANCING UML WITH SECURITY
Abstract: *Unified Modeling Language (UML) is very used in different companies and industries where the process of software analysis plays an important role. Still, the UML has different lacks, such as formal, explicit, support for access control. The security represents an important issue over which we have to stop when designing the access control into the application. In this paper we will discuss about a new approach for expressing security-relevant information that can be mapped in the UML diagrams, such as sequence diagrams, class diagrams and state diagrams. New diagrams that already have been proposed will be shown and presented in a practical manner, such role-based, discretionary and mandatory access controls. The intent of the paper is to give the designers with a set of security and integrity features. Only the necessary features are selected for the application that is designed and furthermore implemented.*

GHEORGHE MIHALACHE
Air Force Academy "Henri Coandă", Brasov, Romania
DYNAMIC CAPABILITIES FOR DEVELOPMENT AND ENHANCEMENT OF BODY MOTRICITY AND PSICHOMOTRIC ABILITIES OF MILITAR STUDENTS BY ADAPTED MEANS FROM MARTIAL ARTS
Abstract: *Through this study we aimed to emphasize that the development of body motricity and psychomotric abilities by means adapted from martial arts to students from military academic world would be possible if we systematically aim at each training lesson and throughout the entire experimental cycle, fulfilment of the aims of the utmost importance (in terms of body motricity and psychomotric training), the enhancement of specialized physical exercise (specific to martial arts) with defining role in the improvement and fulfilment of personality and the preparedness of future multilateral fighters.*

GHEORGHE MIHALACHE
Air Force Academy "Henri Coandă", Brasov, Romania
INTERACTION AND COMPLEMENTARITY'S BETWEEN KARATE SPECIFIC RESOURCES AND ADAPTED TOOLS FROM DIFFERENT SPORT MOTIONS IN MULTILATERALLY TRAINING FOR MILITARY STUDENTS
Abstract: *The multilateral training for future officers is determined by the creation of a training schedule based on: enhancement of movement abilities (speed, force, resistance, coordination, fitness, mobility) and psychomotor (the body scheme, vitality, static and dynamic equilibrium, ambidexterity, muscle tonus, time-space perception, space integration, reaction speed, anticipation speed, decision speed, concentration, emotion stability) and, on the same time, the evolvement, consolidation and fine tuning of a wide spectrum of base movement and applied psychomotor utilities through the karate tools fulfilled with adapted portions from other sports (athletics, gymnastic) all of them contributing to a complete body shape and stress resistance, the characteristics of future military professional combatant with a winner mentality, who has the capability to solve the most stressful situations encountered during the missions from military field.*

CONSTANTIN MORARU, MARIN ION
Technological High School, Starchiojd Town, University Bucharest, Romania
PASSAGES WITH A SIGNIFICANT POTENTIAL IN THE DEVELOPMENT OF RELIGIOUS TOURISM IN THE SUBCARPATHIC AREA BETWEEN BUZAU AND RAMNIC
Abstract : *Passages with a significant potential in the development of religious tourism in the Subcarpathic – the area between Buzau and Ramnic. The religious tourism is a manifestation that can be seen everywhere in a variety of representations. It kept the features of the original pilgrimage although it has developed in terms of contents and other characteristics. Nowadays, especially, the religious tourism assumes a certain degree of self training and knowledge from the tourists. And all these help them make accurate evaluations-related to the architectural or the spiritual significance of the crafts - to the religious and cultural landmarks they have visited. Elaborated and complex pilgrimages performed on religious and traditional reasons are also preserved, such as the compulsory Mecca pilgrimage or those pilgrimages which*

are particular and specific to individual countries or areas. The religious tourism has the main goal of visiting religious buildings that also involve spiritual manifestations.

CONSTANTIN MORARU, MARIN ION
Technological High School, Starchiojd Town, University Bucharest, Romania

LANDSCAPES OF SETTLEMENTS IMPOSED BY ELEMENTS BASINS IN THE SUBCARPATHIC AREA BETWEEN BUZAU AND RAMNIC

Abstract: *The Subcarpathic of Buzau and Râmnic represents a territorial unit, closely linked to the code-altitude aerial drops is a major factor in the definition of the landscape,but especially in the amendment or to conservation. It prints a dynamic permanent and that can introduce significant changes including in the countryside,in the landscape the settlements. Rivers, permanent or temporary, have transformed by erosion, transport and build a space relatively geographically homogeneously by his natural and socio-human in one qualitatively and quantitatively with other dimensions.*

STEFANIA LOREDANA NITA, MARIUS IULIAN MIHAILESCU
Integrated Systems Department, Institute for Computers, Department of IT&C, LUMINA – The University of South East Europe

ABOUT ISSUES AND THREATS FOR CLOUD COMPUTING

Abstract*: In the last few years, cloud computing has become more and more popular among small, middle and large companies because of more reasons. It provides different types of services, such as software applications, platforms and even infrastructures, through abstraction and virtualization, fact that brings to the companies many benefits. One of them is cost reduction because they do not need to buy servers, software products or licenses any more, and they pay just as they consume. On the other hand, the users are freed of the maintenance or upgrading, because this task become the responsibility of the cloud providers. Even if it is very powerful, still, cloud computing has some lacks. For example the security of the data: when the data are transmitted through systems which are not under the control of the user, the risk that data to be compromised is increased, especially the services inherit the vulnerabilities of the technology transformed in that service. In general, in providing of cloud computing services are involved third parties, fact that complicates the keeping of secured data. In this paper, we will identify and analyze the main issues of cloud computing and we will present the existing solutions to this issues.*

VIOLETA N. OPRIS, MADALINA E. OPRIS
Military Technical Academy, Bucharest, Romania, The Bucharest University of Economic Studies, Accounting and Audit Department, Bucharest, Romania

EXPERT SYSTEMS RUNNING ACROSS MULTIPLE CLOUDS. A SUSTAINABLE PERSPECTIVE

Abstract: *An expert system running across multiple clouds takes cloud computing to the next level of innovation. It emulates the decision-making ability of a human expert. Organizations have workloads running in many cloud locations, therefore applications become complex combinations of interconnected software components.*
The organizational strategies include sustainable approaches for resource management. Expert systems, through Cloud computing, provide alternative resources, reliable services and minimum costs. This paper concentrates on an innovative expert system that manages the cloud infrastructure.

TIBERIU PAZARA, MIHAIL PRICOP, IONUT-CRISTIAN SCURTU, CODRUTA PRICOP, OVIDIU RADU
Naval Academy, Constanta Romania, Maritime University, Constanta, Romania, Research Center for Navy, Constanta

DEFECT IDENTIFICATION OF MOVING PARTS OF A MECHANICAL INSTALLATION USING CORRELATION BETWEEN VIBRATION AND NOISE

Abstract:*Cracks due to fatigue or imperfections from manufacturing are common defects for the moving parts of an installation. In this paper, the authors measure the vibrations and noise of a scale model to determine the defects of bearings and other moving parts. Usually, these defects are identified by means of vibration analysis. Here, the authors use noise analysis and correlation between noise and vibration to locate the faults. Finally, conclusions are made regarding which method is more efficient.*

TIBERIU PAZARA, MIHAIL PRICOP, IONUT-CRISTIAN SCURTU, CODRUTA PRICOP
Naval Academy, Constanta, Romania, Maritime University, Constanta, Romania

ANALYSIS OF NOISE AND VIBRATION PRODUCED BY THE EQUIPMENT IN THE REEFER LABORATORY

Abstract: *This paper presents the results of the measurements made in the Reefer simulator from the Naval Academy „Mircea cel Batran". The vibrations of the equipment were measured using accelerometers mounted in key positions and after that, a correlation between vibration levels in these positions was made. The noise produced in the laboratory was evaluated to determine its influence over the performance of the students during simulations.*

MARCEL POMOHACI, SABIN SOPA
"Lucian Blaga" University, Sibiu, Romania, National University of Physical Education and Sport, Bucharest, Romania

HOW IMPORTANT ARE MOTOR ACTIVITIES IN LEAVING A HEALTHY LIFESTYLE AT STUDENTS

Abstract:*This research focused on the importance of motor activities promoting a healthy lifestyle that includes daily sports activities, proper nutrition, and recognition of items harmful to students. In the research, we had a questionnaire of opinions administrated to 100 students from the University "Lucian Blaga". The questionnaire of opinions had as aim to discover student opinion on the importance of sport in developing a healthy lifestyle, leisure sports activities, the frequency of practicing these activities etc. Differences in gender respondents were discovered in different items of the questionnaire, the male respondents like the harmonious physical development, maintaining harmony between the components of life (work, recreation, entertainment, communication, networking, etc.), the constant practice of physical exercise, fun; while female respondents appreciated especially knowing the benefits of practicing physical activities, knowledge of the rules of hygiene, recognition and elimination of risk behaviors, preoccupation to conduct regular health checks, nutrition, and recreation component.*

MARCEL POMOHACI, SABIN SOPA
"Lucian Blaga" University, Sibiu, Romania, National University of Physical Education and Sport, Bucharest, Romania

THE IMPORTANCE OF MOTOR ACTIVITIES IN PROMOTING A HEALTHY LIFESTYLE WITH SOCIAL, MORAL, FORMATIVE AND EDUCATIONAL VALUES

Abstract:*Our study focuses on analyzing the importance of motor activities in promoting a healthy lifestyle having social, moral, formative and educational values that contributes in the global development of students. Physical education at university level can develop values that can further be assets in transforming students in real adults. We used as scientific method the questionnaire of opinions, and we have as respondents 100 students from the "Lucian Blaga" University from Sibiu.*
Conclusions showed that students know the importance of motor activities in a healthy lifestyle and consider important as social values the capacity of communication and interrelation, the capacity of collaboration and mutual help, big capacity of social help, the capacity of taking right decisions in extreme situations, the desire of acting in group. As moral values the balance on the physical and mental level, promoting moral, social, sporting and ethical values, keeping a balance between lifestyle components, promoting the values of a healthy lifestyle. Significant gender differences were found in the items regarding the communication and networking skills, increased capacity of social help, and respect for institutions, capacity to take the right decisions in extreme situations, willingness to act as a group, concern for the objectives, dignity, respect for self and others.

FLORIANA POPESCU
"Dunarea de Jos" University of Galați, Romania

ENGLISH FOR NAVAL ARCHITECTURE PURPOSES (E.N.A.P.), ENGLISH FOR SHIPBUILDING PURPOSES (E.SB.P.) AND ENGLISH FOR MARITIME PURPOSES (E.M.P.) – A TERMINOLOGICALLY-RELATED TRIAD

Abstract*: Most of the historical approaches to human civilization have ascertained water to have always played a vital role in the settlement, development and wealth of any community, providing many other facilities in addition to the necessary beverage complementing our daily bread. As a source of wealth, water has been of great help in the house building process, in gardens and courts for plants and animals or has incented people to spend their time fishing or lying in the sun, travelling or cruising, in all sorts of competitions. Locally, nationally and internationally, water has most of the times provided a wide variety of jobs which were beneficial both to the actively involved individuals and to the urban or rural areas they were part of. Few are the Romanian spots which are in a position similar to that of the town of Galati, where well-articulate institutions have trained professionals specialized in water-based jobs for over seventy-five years. In spite of the numerous facts related to water-dependent jobs, to (high) education opportunities ensured by this town or to the benefits that water may bring to any region wherever in this world, which could open a wide variety of topics of academic discussion, our approach is essentially focused on terminology. This approach is devised to make a few linguistic remarks which concern the three major specialist fields*

mentioned in the title. It opens a perspective embracing these three professional environments whose linking element is water, i.e. naval architecture, shipbuilding and finally, travelling at sea for touristic journeys or leisure, for commercial or military purposes.
We consider these three domains to be tightly intertwined for they work with ships, the ultimate product of naval architects, shipbuilders and ship operators. As research has indicated it, from a strictly linguistic point of view, the three groups of specialists use a terminology consisting of shared elements as well as of field-specific words or syntagms. Since our view is exclusively terminological, the selected examples will be only terms, leaving aside syntagms, idioms or idiomatic structures, and clichés. The paper will present four sets of illustrations to support our identified lexical categories, thus proving that a textual analysis of such samples of language for specific purposes clearly indicates that the study of English for specific purposes has still a lot to offer.

FLORIN POSTOLACHE
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CREATIVE AND DYNAMIC REUSE OF THE RESOURCES INTO A COLLABORATIVE LEARNING ENVIRONMENT
Abstract*: Computer assisted learning, e-learning, on-line learning, web based learning, virtual learning, open learning are different forms of educational ICT implication techniques, based on web, in a continuous increasing. Integration of technology (IT) into the university classrooms provides abilities to effectively communicate one student's ideas to communities who may have different background knowledge. A Collaborative and Learning Environment (CLE) platform, represents a Learning Management System, a Research Collaboration and Project Collaboration System and also an e-Portfolio Solution which creates an open academic environment in order to deliver Accessibility, Features, Tools and Functionality to the participants, in accordance with IMS Global Learning Consortium and other industry standards. The aim of this paper is to highlight the manner in which the formal communication, along with informal communication can contribute to student motivation to initiate his affective and intellectual resources (knowledge, skills, emotional management, etc.) in order to solve key-situations embodied in different learning tasks. At the level of the CLE Platform, the formal and informal communication participates in optimizing message reception, contributing to underlining the learning motivation, at obtaining proficiency and forming professional and transversal competences. Thus, between instructors and students there are developed partnership relations, which lead to increasing the student's learning motivation. In this sense, OCW and OER sites and also, the intercultural exchanges between participants fully contribute to the completion of MOOC Concept (Massive Open Online Courses).*

CORINA SANDIUC
Naval Academy, Constanta, Romania
THE PROCESS OF LEXICAL COMPOSITION IN THE FORMATION OF THE ROMANIAN MARITIME TERMINOLOGY
Abstract: *The present paper aims at describing different types of compound lexemes belonging to the Romanian maritime terminology. Composition or compounding is a word formation process very often associated with the specialized languages, where it has demonstrated great productivity. The result of composition is a new lexical unit that usually answers the need for designation of new technical and technological inventions. There is also a degree of motivation in creating compound terms in the field of science and technology, namely the tendency towards lexical economy, which means that communication becomes more concise and accurate. This aspect also stands out in the neological maritime terms obtained by means of this internal word formation process. The compound maritime terms do not comprise analyzable individual elements, but formations of unitary meaning (which can sometimes be very different from the components' meaning), consisting of two or more elements, which have lost their morphological and semantic individuality and have been re-established as autonomous lexical units.*

IVANICHKA SERBEZOVA, DESPINA GEORGIEVA, DANIELA DRAGANOVA
University of Ruse, Ruse
ASSESSMENT OF APPLIED COMPETENCE AFTER USING VIDEO ALGORITHMS FOR INJECTION TECHNIQUE AMONG MEDICAL STUDENTS
Abstract: *The report examines the creation of a new kind of educational resources - video algorithms for injection technique. Students from the Department of Health Care of the University of Ruse took part in the making of the videos. The video algorithms are based on the internet platform Youtube. Students are expressing considerable interest in them. The applied professional competence is assessed through specially designed protocols. The conclusion drawn from the study is that the video algorithms are positively*

accepted by the students. Through them the future medical personnel could acquire new interactive experience, develop their critical and analytical thinking and acquire new manipulative skills and professional competence.

CATALINA SZEKELY
Education Sciences Departement Oil and Gas University of Ploieşti, Romania

THE INTER-WAR ROMANIA'S FOREIGN POLITICS WITH THE COUNTRIES BORDERING THE BLACK SEA. THE CONTRIBUTION OF NICOLAE TITULESCU

Abstract: *The first to intercede in support of reestablishing a peaceful climate after the First World War was the American president Woodrow Wilson, who, in 1919, proposed The Nations' Society Statute to be adopted. Romania was one of the founding members whose remarkable contribution is worth mentioning, Nicolae Titulescu himself holding the presidency of this organization. Foreign relations of Romania in the Balkans, and especially the ones with the countries bordering the Black Sea, were oriented towards creating a stable political space and an anti-revisionist front, as the Balkan area had been continuously affected and influenced by the alliances and confrontations between the countries in this geographical space.*

PAUL VASILIU
Naval Academy, Constanta, Romania

ALGORITHM FOR DETERMINING THE MAXIMUM VALUE OF ALL SUBGRAPHS WITH*k* VERTICES

Abstract:*In this paper we will prove how all subgraphs with k vertices and weighted edges of a graph can be generated and how can be computed the maximum value of all subgraphs with k vertices."The paper will include a written C++ program that implements the presented algorithm. Moreover, a use case scenario for this algorithm will be described"[1].*

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Naval Academy, Constanta, Romania

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DANA ZECHIA, ALINA BALAGIU
Naval Academy, Constanta, Romania

LEARNING, TEACHING AND OUR BRAIN

Abstract: *Learning and teaching have always been two parts of the educational process. What is the role of our brain in this activity? How do we learn or how do we teach so that the final effects to have the desired results? Learning as a process has always had competitors such as forgetfulness, interruption, laziness, ignorance or even quitting. Teaching is a complex, multifaceted activity, often requiring us as instructors to juggle multiple tasks and goals simultaneously and flexibly. On the other hand the brain is thoroughly involved in, and connected with, everything educators and students do not only at school but also outside it.*

DANA ZECHIA, ALINA BALAGIU
Naval Academy, Constanta, Romania

SOME DIFFICULTIES IN LEARNING AND TEACHING MARITIME ENGLISH

Abstract: *The intensifying need of good knowledge and skills of maritime English is one the characteristics in the global maritime field. With more and more multilingual and multicultural crews joining the seafarers' maritime community, their competence in maritime English has become a day to day concern. During this process of specialized English teaching we have observed there are some learning and teaching problems relating to the skills involved in the English language communication. Current problems of building students' motivation, developing learner autonomy and improving performance are addressed.*