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EFFICIENT ROUTING MECHANISM USING CYCLE BASED NETWORK AND K-HOP SECURITY IN ADHOC NETWORKS

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ABSTRACT

In a multi-domain network, Topology Aggregation (TA) may be adopted to provide limited information regarding intra cluster connectivity without revealing detailed topology information. Nodes are grouped into the cluster. Every cluster has border nodes, which is used for data transmission between source and destination. The K-hop security can be used for the purpose of securing the data communication. The topologies are spanning tree and balanced tree that can be used to reduce bandwidth overhead, delivery delay and to increase throughput and packet delivery ratio. The shortest path can be found using Bhandari's algorithm and Cycle-Based Minimum-Cost Domain-Disjoint Paths (CMCDP) Algorithm for establish the second path in the network . These topologies are compared to demonstrate the advantage of finding shortest path using Bhandari's algorithm

KEYWORDS

Multi-domain, Ad-Hoc Networks, Routing algorithm, K-Hops algorithm,

Network Topologies

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EVALUATION OF HOSPITAL INFORMATION SYSTEMS IN SELECTED HOSPITALS OF IRAN

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ABSTRACT

Due to the information systems objectives, and to avoid duplication and to help improve care quality and reduce cost, it is necessary to conduct continuous evaluation to determine how to achieve these goals. This study was performed using evaluation indices of hospital Information systems (HIS) in selected hospitals of Iran. In this article organizational and server components of hospital information systems in selected hospitals are being assessed. This research is a descriptive cross – sectional study. The study population consisted of the information system of Shohaday Tajrish, Khatamolanbiya, Imam Khomeini and Milad Hospital. Data collecting tools were checklist of hospital information system Evaluation Index, which completed with direct observation and interviews with users. Data analyzed by statistics software SPSS, and presented as statistical tables and graphs. In the studied hospitals, although the most of the organizational components subgroups and hospital information system server components has been set up and used but pharmacy information system, decision support systems, communication services and telemedicine services hadn`t been set up fully in the hospitals. Currently most subtypes of organizational components and hospital information system server components were fully in the designed software and considering all fields in 5 hospitals.

KEYWORDS

Assessment Index, Evaluation, Hospital, Hospital Information System

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TUMOR DETECTION IN MEDICAL IMAGING: A SURVEY

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ABSTRACT

A tumor also known as neoplasm is a growth in the abnormal tissue which can be differentiated from the surrounding tissue by its structure. A tumor may lead to cancer, which is a major leading cause of death and responsible for around 13% of all deaths world-wide. Cancer incidence rate is growing at an alarming rate in the world. Great knowledge and experience on radiology are required for accurate tumor detection in medical imaging. Automation of tumor detection is required because there might be a shortage of skilled radiologists at a time of great need. This paper reviews the processes and techniques used in detecting tumor based on medical imaging results such as mammograms, x-ray computed tomography (x-ray CT) and magnetic resonance imaging (MRI). We find that computer vision based techniques can identify tumors almost at an expert level in various types of medical imagery assisting in diagnosing myriad diseases.

KEYWORDS

Tumor Detection, Medical Imaging, Computer Vision, Machine Learning

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Dematerialized Deposits using XSI- An Application over XSI

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ABSTRACT

Traditional banking was based on paper documents like 'deposit form', 'withdrawal form' etc. The comfort level for the customer on paper based business was high as they can retain the paper and show as proof in case of disputes. The present Internet and Core banking systems which are widely in use are transaction based. One drawback of the present situation is that customer is not able to keep a copy of the transaction due to various reasons like multiple channels and lack of suitable infrastructure at client end etc. As a via media, we tried to bridge the gap and see whether we can give the comfort and trust levels of the paper document coupled with the intelligence of the technology. In this model we propose a method to describe financial product like "Fixed Deposits" using XML technology. At present, banks give the deposits in paper form with the deposit amount, maturity date and interest rate prescribed in the document. The banks system calculates the interest and pays the customer. The paper itself can't calculate interest. It just helps the customer as a proof alone. In our model, we are trying to see whether we can embed the interest calculation algorithm into XML based deposit and give to the customer, so that customer himself can find how much he gets using tools like XSI. This will act as a good verification mechanism, instead of solely depending on banks' systems. To show case this model as a POC, we used XSD, XML and XSI (an in house tool with IDRBT).

KEYWORDS

XSD, XML, Fixed Deposit, GUI , XSI

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ANALYSIS OF THRESHOLD BASED CENTRALIZED LOAD BALANCING POLICY FOR HETEROGENEOUS MACHINES

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ABSTRACT

Heterogeneous machines can be significantly better than homogeneous machines but for that an effective workload distribution policy is required. Maximum realization of the performance can be achieved when system designer will overcome load imbalance condition within the system. Load distribution and load balancing policy together can reduce total execution time and increase system throughput.

In this paper; we provide algorithm analysis of a threshold based job allocation and load balancing policy for heterogeneous system where all incoming jobs are judiciously and transparently distributed among sharing nodes on the basis of jobs' requirement and processor capability for the maximization of performance and decline in execution time. A brief discussion of job allocation, transfer and location policy is given with explanation of how load imbalance condition is solved within the system. A flow of scheme is given with essential code and analysis of present algorithm is given to show how this algorithm is better.

KEYWORD

Heterogeneous Systems, Central Server, Threshold, Load Balancing, Load Distribution, Centralized Load Balancing, Sender Initiative, Receiver Initiative.

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TRADITIONAL VERSUS BLENDED LEARNING METHOD: A COMPARATIVE STUDY ON ITS EFFECTIVENESS IN BUSINESS COMMUNICATION COURSE

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ABSTRACT

This article presents a descriptive comparative study on two methods of teaching, the traditional and blended learning pedagogical approach in a Business Communication course. Forty-four (44) students from the two controlled groups were enrolled in the course for the first semester of school year 2017-2018 participated in the study. The findings indicated that respondents' performance in ENGL118 (English Composition) had an effect on their performance in BUS261(Business Communication) and there was a significant positive relationship between year level and final grade in BUS261. Therefore, it was concluded that the year level and grade in ENGL118 have correlationson student'sperformance in BUS261. The results of the assessments of the two groups were compared and indicated a significant difference in the results which was influenced by respondents' year level and mode of conducting assessments. It is further concluded, that if the characteristics of both groups were the same, blended would have been more effective than the traditional method.This study recommends adopting the blended pedagogical approach not only in BUS261 course but also to other courses as applicable.

KEYWORDS

Flipped Class, Blended Learning, BlackBoard, Business Communication, Teaching Pedagogy

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THE IMPACT OF SOCIAL MEDIA ON ACADEMIC PERFORMANCE OF SELECTED COLLEGE STUDENTS

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ABSTRACT

The purpose of this article is to assess the impact of social media on academic performance of selected college students. In this article, the authors raise the actual impact of daily communication of youth in social media. Descriptive research design was utilized to gain accurate profile of situation.Sixty (60) Business Administration and Management Information System students who are actively using social media are the respondents of the study. It was conducted during the summer semester of academic year 2017- 2018.Summing-up,social networks becomes an integral part of the students' full life, took up most of their free time.Undoubtedly, in social networks, there are also things useful for the development of the students. In addition, communication with peers through social networks can help a student socialize, find new friends, discuss with them issues related to studies. Thus, it can be concluded that social media have a dual impact on student achievement, and it is necessary to approach adolescents' use of social networks with ultimate responsibility.

KEYWORDS

social network, social media,Saudi Arabia, impact of electronic technology, social media effect

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INFLUENCE OF ICTS ON WORKFORCE PRODUCTIVITY IN EGYPTIAN INDUSTRIAL ORGANIZATIONS

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ABSTRACT

Present study aims to investigate the influence of ICTs dimensions (Information Technology (IT), Management Information System (MIS), Office automation (OA), Intranet and Internet) on workforce productivity for a group of industrial organizations in Alexandria - Egypt. The population of the study was managers and staff members working in different areas related to ICTs in the selected industrial organizations at various managerial levels. Descriptive-statistical combined research study was conducted. The selection of the participating industrial organization done using simple random sampling technique. Data collection done using questionnaires. In order to check the validity of the study instrument expert comments were used and the reliability of the questions calculated as 79% using Cronbach's Alpha coefficient. The analysis of instrument data done using single variable t-test, Friedman and variance analysis. The study findings revealed that the specified dimensions of ICTs positively affect workforce productivity of industrial organizations in Alexandria - Egypt.

KEYWORDS

ICTs, Workforce Productivity, Egypt, Industrial Organizations

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CRITICAL SUCCESS FACTORS FOR INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY IMPLEMENTATION IN PUBLIC SERVICE ORGANIZATIONS: AN EXPLORATORY STUDY

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Abstract

In recent years, market competitions and internal efficiency requirements derived many Information Technology (IT) functions to shift their paradigms from IT asset management to IT service management (ITSM). Consequently, a growing number of public and private organizations are implementing the ITIL (IT Infrastructure Library) "best practice" as a framework for improving IT service management processes. This paper presents an exploratory in-depth case study of two public service organizations in the kingdom of Saudi Arabia deemed successfully implemented ITIL V3 processes. The case studies identify several critical success factors (CSF) associated with ITIL implementation success. These CSF are then compared with factors identified in the literature to shed light on success factors and challenges to offer a learning experience for organizations currently undergoing or planning ITIL implementation.

Keywords

ITIL, IT Service Management, critical success factors, Saudi Arabia, project, process.

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ACTIVE CONTROLLER DESIGN FOR THE GENERALIZED PROJECTIVE SYNCHRONIZATION OF THREE-SCROLL CHAOTIC SYSTEMS

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ABSTRACT

This paper discusses the design of active controllers for generalized projective synchronization (GPS) of identical Wang 3-scroll chaotic systems (Wang, 2009), identical Dadras 3-scroll chaotic systems (Dadras and Momeni, 2009) and non-identical Wang 3-scroll system and Dadras 3-scroll system. The synchronization results (GPS) derived in this paper for the 3-scroll chaotic systems have been derived using active control method and established using Lyapunov stability theory. Since the Lyapunov exponents are not required for these calculations, the active control method is very effective and convenient for achieving the generalized projective synchronization (GPS) of the 3-scroll chaotic systems addressed in this paper. Numerical simulations are provided to illustrate the effectiveness of the GPS synchronization results derived in this paper.

KEYWORDS

Active Control, Chaos, Chaotic Systems, Generalized Projective Synchronization, 3-Scroll Systems.

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