

المؤتمر العلمي الخامس غشر المتخصص

تحت شعار

توظيف العلوم المندسية والماسوبية للنموض التنموي

24-23 نيسان 2016

منهاج المؤتمر

العراق – بغداد

كلية المنصور الجامعة المؤتمر العلمي الخامس غشر المتخصى توظيف العلوم المندسية والداسوبية النموض التنموي اللجزة التحضيرية :

رئيس اللجنة	 أ.د. عبد الرسول عبد جاسم
عضوأ	ا <u>م د.</u> سعید عبیدعبدالامیر
عضوأ	أ.م.د. عبد الستار شاكر سلمان
عضوأ	د. وليد حنا قرما
عضوأ	د. محمد عبد الكريم عبد الوهاب
عضوأ	د محمود شکر محمود
عضوأ	السيد حسين جواد المعمار
عضوأ	السيد عقيل داود حسن

اللجزة العلمية:

رئيس اللجنة	أ.د.عبد الرسول عبد جاسم
عضوأ	أ.د.محمد زكي الفائز
عضوأ	أ.د. عبد المنعم رحمة ابو طبيخ
عضوأ	أ.د. صالح مهدي معارج
عضوأ	أدهاني محمد فهمي
عضوأ	أ.م.د. جين جليل اسطيفان
عضوأ	أمد سها محمد هادي
عضوأ	أمد ضاري يوسف محمد
عضوأ	أ.م.د.اشرف عبدالمهادي محمد
عضوأ	أمد سعيد عبيدعبدالأمير



- السيدة سهير بشير ابراهيم
- السيدة آلآء حكمة عبدالستار



المؤتمر العلمي الذامس عشر المتخصص



الساعة 8.15 - 9.00 التسجيل الساعة 9.00 افتتاح المؤتمر (قاعة المنصور المؤتمرات) النشيد الوطني
أيات من الذكر الحكيم
كامة اللجنة التحضيرية للمؤتمر يلقيهاعميد الكليه الاستاذ الدكتور عبد الرسول عبد جاسم
كامة جامعة هيدرزفيلد البريطانية

محاضرة الافتتاح بعنوان (واقع الحكومة الالكترونية) يلقيها الاستاذ المساعد الدكتور خالد عبدالله حمادي

11.00 - 10.30 استراحة

الجلسة الأولى الساعة 11.00 – 12.00 قاعة المنصور للمؤتمرات

رئيس الجلسة : أ.د. محمدزكي الفائز /عميد كلية هندسة المعلومات /جامعة النهرين مقرر الجلسة : م.د. ليث باقر سلمان / كلية المنصور الجامعة

Hexapod Robot Static Analysis Using Genetic Algorithm Simulation and Experimental Work أ.م.د. فراس عبدالرزاق رحيم ، م.م.هند زهير خليل، م.م.احمد رؤف،م.م.محمد نوري (الجامعة التكنولوجية) Mobile Robotic Arm Contolled by Android Based on Microcontroller

م.د. خالدة شعبان رجب، م.م.محمد احسان، الست وسن عماد رؤف (الجامعة التكنولوجية)

A Study of an Efficient Power Consumption Wireless Communication Techniques of Internet of Thinks (IOT) Applications

م.د. محمود شکر محمود، م.د. عدي عبدالحسين محمد

(كلية المنصور الجامعة)

قاعة رقه 1 (معتبر الحاديمية المنصور للشبكابته)

رئيس الجلسة : ا.د. هاني محمد فهمي/كلية المنصور الجامعة . تربيس الجلسة : المناسبة المناسبة المنصور الجامعة .

مقرر الجلسة : م.د. قاسم علي حسين/ كلية المنصور الجامعة

Behavior of Self-Consolidating Concrete Filled Steel Tube Columns Subjected to High Temperatures أ.د. هاني محمد فهمي (كلية المنصور الجامعة) أ.د. محمد جبر جويج م.م. عمر خالد (جامعة النهرين)

Numerical investigation of thermal performance and phase change of wax paraffin layer surrounding water tank

أ.د. جلال محمد جليل (الجامعة التكنولوجية) م.د. محمد عبدالكريم الرواف (كلية المنصور الجامعة)

Performance of composite columns concrete encased – Full interaction

أ. م.د. وليد عواد وريوش م.د. محمد مكي عباس م.م. سيف خضير علي (الجامعة المستنصرية)

قاعة رقو 2 (منتبر الحاديمية المنصور للشبكاره)



رئيس الجلسة : أ.م.د. جين جليل اسطيفان/مساعد رئيس جامعة تكنولوجيا المعلومات والاتصالات مقرر الجلسة : مدرز بنب محمد حسين/كلية المنصور الجامعة

Hexapod Robot Static Stability Analysis using Genetic Algorithm Simulation and Experimental Work (الجامعة التكنولوجية) أ.د. حنان عبدالرضا عكار أ.م.د. عابد خلف السامرائي م. ازاد بدر Study the Effect of Mobile Handset Radio Frequency on Human Being Health

أ.م.د. قيدار مجيد قبع، م.د. ضياء محمد علي (جامعة الموصل) م.م. غادة محمود فيصل (الجامعة التكنولوجية) Design and Simulate an Efficient Algorithme for Biometric Recognition in Wireless Sensor Network Based on Hybrid Technique

أمد. مثيل عماد الدين عبدالمنعم مم م فاطمة بهجت ابر اهيم (الجامعة التكنولوجية) Modern Security Applications for Banks and Accounting Information Systems

(كلية المنصور الجامعة)

م. محمد قاسم شير ز ا

الجلسة الثانية

الساعة 12.15 - 12.15

قاعة المنصور للمؤتمرات

رئيس الجلسة: أم د. ضارى يوسف محمود/ الجامعة التكنولوجية مقرر الجلسة : مد محمود شكر محمود/كلبة المنصور الجامعة

Intelligent Fault Detection for Proton Exchange Membrane Fuel Cell PEMFC Based On **Artificiel Neural Network** (الجامعة التكنولوجية)

م.د. عباس حسين عيسى ، المهندس حسين محسن هادي

Investigation of Fiber Laser for Low Power Applications

م.د. رياض خلف احمد (جامعة ديالي)

Comprehensive Study and Design of Antenna Parameters (وزارة التعليم العالى والبحث العلمي)

م.م. على رزوقي حسين

قاعة رقو 1 (معتبر الحاديمية المنصور للشبكات،)

رئيس الجلسة : أم د اشر ف عبدالهادي محمد / الجامعة المستنصر بة مقرر الجلسة : م.د. مألوف محمود سلبم/ كلبة المنصور الجامعة

Rehabilitation of Damaged Columns-Piles Joints in Quri Chi* Bridge Using Composite Section of RC Confined By Steel Casing أ.م.د. على حميد عزيز (الجامعة المستنصرية)

Using CFRP for Shear Strengthening of Continuous SCC Hollow Beams Containing Transverse **Internal Ribs**

أ.م.د. على حميد عزيز أ.م.د. اشرف عبدالهادي محمد م. فواز عادل (الجامعة المستنصرية)

Optimization Approach for Rehabilitation of Sever Damages in Concrete Members

(كلية المنصور الجامعة) م. د. احمد منسى موسى



قاعة رقو 2 (معتبر الحاديمية المنصور للشبكات،)

رئيس الجلسة : أ.م.د. سها محمد هادي/ كلية هندسة الخوارزمي – جامعة بغداد مقرر الجلسة : م.د.نور كاظم مفتن /كلية المنصور الجامعة

Management Information Systems in Public Organizations أ.م.د. عبدالناصر علك حافظ (وزارة التعليم العالى والبحث العلمي) أ.م.د. وفاء عدنان حميد (جامعة بغداد) م.م. حسين وليد حسين (وزارة التعليم العالى والبحث العلمي) Design and Implementation an Efficient High Scalable CDMA System

أ.م.د. محمود زكي عبدالله (الجامعة المستنصرية) م.م. فادية نوري حمادي (جامعة بغداد)

SELMS: A Secure E-Library Management System

أ.م.د. محمد عصام يونس السيد مصطفى هاشم عبدالكريم (جامعة بغداد) A Flow Propagation Method For Detectionof Local Community

م طارق متمد (جامعة كركوك) الست هديل طارق ابراهيم م. سعد قاسم فليح (جامعة ديالي)

الجلسة العتامية(قاعة المنصور للمؤتمرات)

الساعة 1.30 البيان الختامي توزيع الشهادات على المشاركين التقاط صورة جماعية التوجه الى نادى الطلبة لتناول وجبة الغداء





كلية المنصور الجامعة المؤتمر العلمي الخامس غشر المتخصص توظيفم العلوم المنحسية والحاسوبية للنموض التنموي

Hexapod Robot Static Stability Analysis using Genetic Algorithm Simulation and Experimental Work

Firas A. Raheem, Ph.D. (Asst. Prof.) Ahmad Raoof(Asst. Lecturrer) University of Technology

Abstract

BH3-R hexapod robot has six legs for walking with a round body. The mechanical structure of hexapod robot like insect so that it has three main gaits: wave gait, ripple gait, and tripod gait. The main problem of hexapod robot is to get the best static stable during its walking. In the proposed approach, the static stability analysis using Genetic Algorithm (GA) is implemented experimentally for three gaits. The result has been get the stable best coordinates of hexapod legs tips (x_i, y_i, z_i) and the stable best coordinates of the center body coordinates of hexapod legs tips (x_{ci}, y_{ci}) according to the best static stability. In proposed work, stability margin analysis is used as fitness function in Genetic Algorithm (GA) for each gait. The results of stability margins are evaluated and the hexapod robot walking according to new stable coordinates of legs tips. Practically the velocities of the wave gait is lowest gait while, the ripple is more velocity than wave but the tripod gait is fastest gait. The error of real path planning of BH3-R hexapod robot is small in all three gaits. The equations of Pulse Width Modulation (PWM) for three joints angles in each leg are proposed experimentally for BH3-R hexapod robot.



المؤتمر العلمي الخامس مغر المتخصص

توظيفم العلوم المندسية والماسوبية للنموض التنموي

Mobile Robotic Arm Controlled by Android Based on Microcontroller

Wassan E. RaufKhaleda Sh. Rejab Ph.D. (Lecturrer) Mohammed E. Safi(Asst. Lecturrer) University of Technology

Abstract

In recent year, with the increase usage of wireless application and where nearly everything which was controlled by humans is being automated by using robots. In this paper a control system of the mobile arm robot was built by using android application that represents the transmitter in which the command sends through mobile using Bluetooth. Where the receiver receives the data by the Bluetooth (HC_05) to generate the specific motion by take the command from Arduino UNO. The purpose of this paper is to design and implement a mobile arm robot for dangerous and difficult places that humans can't reach it and make the specific tasks.



كلية المنصور الجامعة المؤتمر العلمي الخامس ممشر المتخصص

توظيفت العلوم المندسية والداسوبية للنموض التنموي

A Study of an Efficient Power Consumption Wireless Communication Techniques/ Module for Internet of Things (IoT) Applications

Mahmoud Shuker MahmoudPh.D. (Lecturrer)Auday A.H. MohamadPh.D. (Lecturrer) Al-Mansour University College

<u>Abstract</u>

A study of wireless technologies for IoT applications in term of power consumption has been presented in this paper. The study focuses on the importance of using low power wireless techniques and modules in IoT applications by introducing a comparative between different low power wireless communication techniques such as ZigBee, Low Power Wi-Fi, 6LowPAN, LPWA and their modules to conserve power and longing the life for the IoT network sensors. The approach of the study was in term of protocol used and the particular module that achieve that protocol. The candidate protocols were classified according to the range of connectivity between sensor nodes. For short ranges connectivity the candidate protocols were ZigBee, 6LoWPAN and low power Wi-Fi. For long connectivity the candidate was LoRaWAN protocol. The results of the study demonstrate that the choice of module for each protocol plays a vital role in battery life due to the difference of power consumption for each module/protocol. So, the evaluation of protocols with each other depends on the module used.



كلية المنصور الجامعة المؤتمر العلميي الخامس ممشر المتخصص

توظيفتم العلوم المندسية والماسوبية للنموض التنموي

Behavior of Self-Consolidating Concrete Filled Steel Tube Columns Subjected to High Temperatures

Hani M. FahmiPh.D. (Prof.)Muhsin J. JweegPh.D. (Prof.) Omar Khalid (Asst. Lecturrer)

Al-Mansour University College Al-Nahrain University Al-Nahrain University

<u>Abstract</u>

This paper presents the results of an experimental investigation of the behavior of self-consolidating concrete (SCC) filled steel tube columns subjected to high temperatures. Laboratory tests were carried out on 28 column specimens to find the temperature distribution during heating, load-deformation relationship, and the residual strengths of SCC filled columns after being subjected to high temperatures. The investigation included finding the effects of several variables including the temperature exposure, concrete compressive strength, steel tube diameter and steel tube wall thickness on the behavior of the composite columns. The experimental results obtained are used in a nonlinear finite element analysis which will be presented in a future paper.



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توظيفم العلوم المندسية والداسوبية للنموض التنموي

Numerical Investigation of Thermal Performance and Phase Change of Wax Paraffin Layer Surrounding Water Tank

Mohammed A. Al RawafPh.D. (Lecturrer) Al-Mansour University College Jalal M. JalilPh.D. (Prof.) University of Technology

Abstract

Finite volume method was used to investigate the thermal performance and phase change of wax paraffin layers surrounding heated water tank (1 m cube). Different timing of heater power on (on and off hours) and different thickness (0.06, 0.1, 0.133 and 0.166 m) were investigated. The investigation shows the required wax thickness necessary to keep the temperature of the wax paraffin layers within required range during period of power off. Thickness of 0.1 m of paraffin wax with scheme (14 hour heater on and 10 hour heater off) shows best performance among the other combinations. In this combination, reasonable working heater time (economic) and the temperature was kept nearly 50 C along the whole period.



المؤتمر العلمي الذامس عشر المتخصص

توظيف العلوم المندسية والماسوبية للنموض التنموي

Performance of Composite Columns Concrete Encased – Full Interaction

Waleed A. WaryoshPh.D.(Asst. Prof.)Mohammad M. Abbass Ph.D.(Lecturer)Saif K. Ali(Asst.Lecturer)

Al-Mustansiriayah University

<u>Abstract</u>

Composite column like reinforced concrete columns is a compression structural element made from a concrete encased hot-rolled steel section or a concrete filled tubular section of hot-rolled steel and is generally used to carry more loading as compared with concrete or steel section alone. The advantages of composite columns that concrete encased sections are high bearing resistance, high fire resistance, and economical solution with regard to material costs. Disadvantages are high costs for formwork, difficult solutions for connections with beams, difficulties in case of later strengthening of the column and in special case edge protection is necessary. In this paper, analysis and design of composite columns with full interaction theory was adopted to check the performance and increased in columns capacity as compared with columns made from concrete or steel section alone. Finite element approached by ETABS software for full composite structural high rise building and take single worst column to simulated in ANSYS with handout calculations to verify the analysis and design. Local and global buckling, capacity, and failure were checked for different boundary conditions supports at ends of each column.



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توظيفم العلوم المندسية والماسوبية للنموض التنموي

Simulation Design of an Artificial Intelligent System Used for Sensor Network Application

Hanan A. R. AkkarPh.D. (Prof.)Aied K. AL-SamarriePh.D. (Asst. Prof.)Azzad B.Saeed(Lecturer) University of Technology

Abstract:

Artificial Intelligent Systems are the *brains* of the sensor networks; they are used for, processing the output signals of the sensor units, and then presenting specific decisions.One of the important artificial intelligent systems had been designed, and simulated in this paper, which is named Backpropagation Neural Network, it is a powerful trained network, with optimization method of updating the weights and biases of the hidden and output layers.SATLINS and SATLIN functions had been used as linear activation functions for the hidden and output layers. *Traingda* function had been used as a training function for the proposed system, which is a gradient descent with adaptive learning rate method of training. It is worth to mention, that no previous research used these three functions together for such analysis.

This system had been simulated and tested using MATLAB package, the testing process had offered stimulant results, whereas, the actual output data had fitted the desired output data, and the Mean Square Error had reached to zerowith 87 iterations. No previous research had reached to this optimal result for such design.



المؤتمر العلمي الذامس غشر المتخصص

توظيفم العلوم المندسية والماسوبية للنموض التنموي

Study the Effect of Mobile Handset Radio Frequency on Human being Health

G.M.Faisal (Asst. Lecturer) D.M. Al-zobydiPh.D. (Lecturer) K M.QuboaPh.D. (Asst. Prof.)

University of Mosul

University of Mosul

University of Technology

Abstract:

This work includes study and evaluation of Specific Absorption Rate (SAR) of electromagnetic waves in human body (head &hand). The radio frequency (RF) waves which are normally radiated from the handset mobile phones, which are widely used nowadays by the people of different ranks and ages. The subject which has attracted the attention of the researchers in the later time. The process of evaluation needs three elements to be presented. The human head, hand and the handset mobile. Both homogenous model of SAM head and hand and heterogeneous model of head (voxel) are used in this work. The human hand is designed with seven layers to be near the heterogeneous (real) hand. The handset mobile is designed by the designer with patch antenna of four bands: 900MHz, 1800MHz, 2100MHz and 2400MHz. The process of evaluation is done for different positions situations and handling of handset mobile phone with respect to the vertical head axis for both homogenous and heterogeneous models. The results show that the values of SAR are more real for heterogeneous model than homogenous one.



كلية المنصور الجامعة المؤتمر العلمي الخامس ممشر المتخصص

توظيفه العلوم المندسية والماسوبية للنموض التنموي

Design and Simulate an Efficient Algorithm for Biometric Recognition in Wireless Sensor Network Based on Hybrid Technique

Matheel E. AbdulmunemPh.D. (Asst. Prof.)Fatima B. Ibrahim(Asst. Lecturer)University of TechnologyAl-Khawarizmy College of Engineering

Abstract

The need for a flexible and cost effective biometric security system is the inspired of this paper. Face recognition is a good contactless biometric and it is suitable and applicable for Wireless Sensor Network (WSN). Image processing and image communication is a challenges task in WSN due to the heavy processing and communication that reduce the life time of the network. This paper proposed a face recognition algorithm on WSN depending on the centralized algorithm principle that carry the load of the work to the sink node and compress the communication data to 87.5%. An efficient hybrid algorithm is proposed based on the benefit of wavelet decomposition to extract the most distractive features of the face and Eigen face method to classify faces according to the minimum distance with feature vectors on a flat architecture to the WSN with gossiping routing protocol. An Excellent recognition rate is achieved reaching to 100% with a minimum computation time.



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توظيفم العلوم المندسية والداسوبية للنموض التنموي

Modern Security Applications for Banks and Accounting

Information Systems

Mohammed KasiemShariza(Lecturer)

Al-Mansour University College

Abstract:

The rise of the Internet has completely re-defined the nature of information security. All companies now generally and banks particularly face global threats to their networks, and, more importantly, to their accounting data and information. The number of Internet security incidents reported increased every year.

The previous facts lead us to this research. The objective of this research is to evaluate the Modern Security Applications for Banks and Accounting Information Systems. An empirical survey-using questionnaire was conducted to achieve the above-mentioned objective

The research results shows that banks use Modern Security Applications also shows that banks has lack in Accounting Information Systems.

The main recommendation for this research is to increase training strength in all directions in accounting information systems to minimize possible threats that may appear.

الجلسة الثانية



المؤتمر العلمي الخامس عشر المتخصص

توظيفم العلوم المندسية والماسوبية للنموض التنموي

Intelligent Fault Detection for Proton Exchange Membrane Fuel Cell PEMFC Based on Artificial Neural Network ANN

Abbas H. IssaPh.D.(Lecturer) Eng. Hussein M. Hadi.

University of Technology

Abstract:

In this paper a fault detection and isolation (FDI) for proton exchange membrane fuel cell (PEMFC) has been presented. Artificial Neural Network (ANN) is used to detect the faults. An Input\output data set have been acquisitioned from PEMFC and used to design a neural network model. The model designed gives a steady state prediction for a given input. When the changes in output of the plant voltage or current due to any emergence events, the output of the PEMFC is compared to the output of the model, then a residual signal is monitored and used to detect the faults. Three types of faults have been studied in the presented work, these are; Abrupt, Incipient and Intermittent faults. The steady state model designed and simulated using Matlab. The validation performance of the designed model is 0.029. The model shows a very good ability to predict outputs and hence detect faults.



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Investigation of Fiber Laser for Low Power Applications

Riyadh Khlf AhmedPh.D.(Lecturer)

University of Diyala

Abstract:

A fiber laser involving Fiber Bragg Grating designed and implemented to work at 1550 nm communication window was proposed and experimentally demonstrated. This paper presents the fiber laser for low power applications based on Fiber Bragg Grating where the output of the Fiber Bragg Grating is present in the wavelength domain, so it requires sophisticated devices to measure wavelength .By measuring the output power corresponding to the measured wavelength, the system show low attenuation and high wavelength capabilities make fiber laser ideal for gigabit transmission and beyond. This technique is simple, low cost and potentially allows for very high sensitivity.



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توظيفم العلوم المندسية والماسوبية للنموض التنموي

Comparative Study and Design of Antenna Array Parameters

Ali R. Hussein(Assist. Lecturer)

Ministry of Higher Education and Scientific Research

Abstract:

An array of antenna elements is a spatially extended collection of N similar radiators or elements, where N is a countable number bigger than 1, and the term "similar radiators" means that all the elements have the same elements don't have to be spaced on a regular grid, neither do they have to have the same terminal voltages, but it is assumd that they are all fed with the same frequency and that one can define a fixed amplitude and phase angle for the drive voltage of each element. Arrays of antennas are used to direct radiated power towards a desired angular sector.

The number, type, grometrical arrangement, and relative amplitudes and phases of the array elements depend on the angular pattern that must be achieved, the influence that each parameter of the above has on the overall radiation characteristics will be the subject of this research paper.

Many results were obtained such as, the array directivity increases with the number of elements, the number of side lobes and the side lobe level increase with the numbers of elements, a larger element spacing results is a higher directivity. However, the element spacing is generally kept smaller than $\lambda/2$ to avoid the occurrence of grating lobes. When the elements be an isotropic antennas then the overall radiation pattern is the same as the array factor since an isotropic element radiates the same amount of power in all directions while when the elements be a dipole antennas the overall radiation pattern is clearly different from the array factor i.e. the directivity has increased with the dipole's directivity and the overall radiation pattern is slightly modified due to the dipole's radiation pattern finally when the elements are dipoles on an inginite ground plane the overall array does indeed not radiate in directions were the entenna element doesn't radiate, the overall array's radiation pattern has thus a perfect front to back ratio.



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توظيفم العلوم المندسية والماسوبية للنموض التنموي

Rehabilitation of Damaged Columns-Piles Joints in Quri Chi* Bridge Using Composite Section of RC Confined By Steel Casing

Ali Hameed Aziz Ph. D. (Assis. Pro.) Al-Mustansirea University

Abstract

Over the past years, Quri Chi Bridge has been subjected to severely torrents led to erosion and collapse of soil at pile heads during execution, causing some damages to the heads of piles (joint between the pier and the pile) and its aspects. Technical reports indicated that the piles are implemented in diameter of (150 cm) with depths ranging from (12m) to (15m) and these ranges are more than what is required if we take into account soil capacity in this depths is over (20 ton/m^2) , and the maximum capacity is within limits that are designed for. Test results indicated that the concrete of piles have a compressive strength of (31 MPa) to (59 MPa) with ultimate pile capacity ranged from (600 tons) to (720 tons) with deflection not exceed (5mm). The site surveys records deviations in location and coordinates of some piles (in varying degrees) in the longitudinal and transverse directions. Two methods for treatment have proposed, the first method is construct of pile cap around the damaged joints, while, the second method is using RC confined by steel casing. The second proposal is adopted and the structural analysis indicated that the used method is saved.



المؤتمر العلمي الخامس غشر المتخصص

توظيفم العلوم المندسية والماسوبية للنموض التنموي

Strengthening of Continuous SCC Hollow Beams under Shear Stresses Using Warped CFRP Strips

Ali H. Aziz Ph. D. (Asst. Prof.)Ashraf A. AlfeehanPh. D. (Asst. Prof.)Eng. Fawaz A. Hussein Al-Mustansirea University

Abstract

The present paper is deal with shear strength evaluation of continuous self-compacting concrete hollow beams containing internal concrete ribs and externally strengthening by carbon fiber strips (CFRP). Six full-scale beam specimens and series of control specimens were tested. The adopted variables in this study are the number of internal concrete ribs and external U-shape CFRP strips at (45°). Experimental results show that the shear failure was the dominant failure for all tested beams. The cracking and ultimate load are reduced by about (19.6-30.6%) for the hollow beams specimens contains five and three ribs respectively compared with the reference beam. The ultimate load was increased for about (50.7%) for five internal ribs hollow beams strengthened by CFRP strips in compared with the same beams but without strengthening. While, the ultimate load was increased for about (33.46%), for beam specimen who has three internal ribs and strengthened by CFRP, in comparison with the same beams but without strengthening.



المؤتمر العلمي الذامس عشر المتخصص

توظيفم العلوم المندسية والماسوبية للنموض التنموي

Optimization Approach for Rehabilitation of Sever Damages in Concrete Members

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Abstract:

Structural concrete members subjected to sever conditions may suffer from sever damages leading to extreme reduction in their strength and structural Behavior. Such reduction has risky effects on safety of structure. Diagnosing and rehabilitation of these damages is an essential objective to control the problems and to reduce the probability of building collapse especially in early stages. Selection of the optimum rehabilitation technique leads to structural and economic benefits. Thisselection is affected by several factors and requires high skills and experience. Therefore, development of an optimization system is very useful for selection of the best solution in the domain of this study. This study aims to develop a neural network system to select the optimum solution in this domain. The proposed system is verified and validated to ensure its efficiency and flexibility.



المؤتمر العلمي الخامس غشر المتخصص

توظيف العلوم المندسية والماسوبية للنموض التنموي

Management Information Systems in Public Organizations

Abdul Nasser H. Alek Ph.D.(Asst. Prof.)Wafaa A. Hameed Ph.D.(Asst. Prof.)Husaen W. Husaen (Asst. Lecturer)Ministry of Higher EducationBaghdad UniversityMinistry of Higher Educationand Scientific Researchand Scientific Research

Abstract:

Multiple organization resources (material. financial. human and informational) for each resource of these resources play an important role in the administration's performance of its functions, as well as it is known that managers exercising administrative functions (planning, organization, motivation and control, leadership and decision-making) to use those resources to achieve the goals of organizations, and the exercise of those functions the use of resources and achieve the set targets are described in the administration as a success or not. And it highlights the importance of the information resource of its association with all the other resources in addition to being the main supplier for the exercise of all administrative functions.

We need information on the financial capabilities and financial resources owned or invested and the income earned and the alternatives available, and human resources management we need information on the qualifications of personnel and training, which involved or which require participation by and information for their performance to their business and jobs for the purpose of making the decision on bonus exchange and motivate and so on. And also information on the material resources of the buildings, machinery, equipment and furniture and Andtharat assets, code. All that information to the other is the most important tools to exercise administrative functions, there is no planning succeed without good information and quantity, type and are available in a timely manner, and the organization does not stimulate nor control nor direction or leadership and there is no decision without the availability of information resource. .If the General Administration of China as a philosopher Confucius said (Confucius) (a tool good governance), the information is a weapon successful manager.



المؤتمر العلمي الذامس عشر المتخصص

توظيف العلوم المندسية والماسوبية للنموض التنموي

Design and Implementation an Efficient High Scalable CDMA System

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Abstract:

The Code Division Multiple Access system CDMA is one of the modern technologies for transmitting and receiving data in the communication systems, the main aspect of this system focuses on transmitting multiple frames of data with different codes through a single channel. This paper will give an efficient proposal approach for spreading and coding the base signal that can be increased the performance of CDMA system, and made this system operates for a wide range multi users, noiseless and high data rate of wireless transmission. This proposal approach applied a good way for detecting errors in the transmitted frames of data through the parity check technique, as well as applying an adaptive filter for noise reduction that may be occurred in the process of sending and receiving data through the CDMA system, finally the verification of this approach is done by written a program using a MATLAB source code. The obtained results give a focus about enhancing the process of transmitting and receiving data through this system with no errors and damaged frames.



المؤتمر العلمي الخامس عشر المتخصص

توظيفهم العلوم المندسية والماسوبية للنموض التنموي

SELMS: A Secure E-Library Management System

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Abstract:

The RFID technology stands at the forefront of the technologies driving the vision. However, using RFID technology has bleeding edges in adopting it for sensitive applications because RFID still has security and privacy issues. This paper reviews the state-of-the-art of RFID and security issues and proposes an enhancement for three pass authentication protocol based on passive RFID and cryptographic services to make the adoption of such sensitive applications more practical. As a proof of concept, this paper proposes a secure E-library management system (SELMS) and gives the architectural and detailed design of the system modules to facilitate the implementation of such system in real environment.



كلية المنصور الجامعة المؤتمر العلمي الخامس محشر المتخصص

توظيف العلوم المندسية والداسوبية للنموض التنموي

A Flow Propagation Method for Detection of Local Community

Hadeel Tariq Ibrahim	Saad Q. Albawi (Lecturer)	Tareq Mohamed (Lecturer)
Diyala University	Diyala University	Kirkuk University

Abstract:

This paper is using an algorithm (Flow-Pro) for finding the node community in a complex network without need to know the information of the whole graph. In general, the researchers supposed their network based on undirected graph and the edge weight for each two connected, neighbor nodes are equal to 1, otherwise it will be 0. In the first step, the function implemented to give community, according to the stored flow. Synthetic data were used with 20,000 nodes. Also, 20 communities had been used. In this paper, edges weights N x N for network used, where N denotes the number of nodes. The total number of messages that produced from the flow algorithm for 1000 nodes was calculated (299392), where for 20000 nodes in our result was (45,582,924) messages.