Volume 3 Issue 5, April 2015

International Journal of Innovative Science and Modern Engineering

ISSN : 2319 - 6386 (Online)
Website: www.ijisme.org

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.
Exploring Innovation: A Key for Dedicated Services

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S. No	Volume-3 Issue-5, April 2015, ISSN: 2319–6386 (Online) Published By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.	Page No.

1.

Authors: Susanto Tirtoprojo, M M

Paper Title: The Determination and Validation of Dimension of Islamic Health Care Service Quality in ISITEKS (Islam Ilmu Teknologi dan Seni) Boarding School Imogiri, Bantul, Jogjakarta, Indonesia

Abstract: This study aims to test 55 point of in-depth interview items to reveal the quality of Islamic health care practice according to patients' experience in managing their health, whether for medication, prevention, and health care in normal health condition. This study uses qualitative research method. The data were collected from 10 participants by using in-depth interview to identify the dimension of health care service quality, as well as from 30 participants by in-depth interview using list of qeustions which is compiled based on the identification of quality dimension to assess health care service they perceive. In-depth interview can be analyzed correctly according to the purposes, through IPA (Interpretative Phenomenological Analysis). There are 55 points in the in-depth interview to measure the performance of Islamic health care. The researcher found that there are two core dimensions to revive The Nuclear Biochip Health Care, the dimension of health information and the dimension of GCU (General Check-Up) result. The 29 point in the in-depth interview can be applied in the research on health care service satisfaction at various hospitals, especially Islamic Hospital.

Keywords: Instant health information, Islamic hospitals, Nuclear Biochip Health Service, Quantum General Checkup.

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2.

Authors: Balamurugan P, Ramya G

Paper Title: Multikeyword Retrieval over Encrypted Data

Abstract: The main aim of project is data owners are motivated to outsource their complex data management systems from local sites to the cloud for great flexibility and economic savings. But for protecting data privacy, sensitive data has to be encrypted before outsourcing, which obsoletes traditional data utilization based on plaintext keyword search. Thus, enabling an encrypted data search service is of paramount importance. Considering the large number of data users and documents in the cloud or server, it is necessary to allow multiple keywords in the search request and return documents in the order of their relevance to these keywords. Related works on searchable encryption focus on single keyword search or Boolean keyword search, and sort the search results. In this process, define and solve the challenging problem of privacy preserving Multi-keyword ranked search over encrypted data. Among various multi keyword semantics, choose the efficient similarity measure of coordinate matching, as many matches as possible, to capture the relevance of data documents to the search query. Provide the data to the users in a secure manner.

Keywords: Two round searchable encryption, searchable symmetric encryption, order preserving encryption, multi keyword search.

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Authors:	**S. Anita, S. Jothi**
Paper Title:	**Implementation of Android Voice Recognition for Smart Home Application Using Bluetooth**

Abstract: Bluetooth technology is a low power wireless communication intended to replace the cables connecting many different devices. The low cost Bluetooth technology is open standard technology for implementing short range wireless communication. In this paper two android devices are connected through Bluetooth technology, which controls the electrical devices (Fan, Light) by Voice recognition. The developed system recognizes the voice commands, convert them into proper text and send the text through Bluetooth wireless medium. The received text is associated with ARM 11, performs the required switching operation and the output is acknowledged in the transmitter section. Hence, this paper has been presented for elderly and disabled people to control home appliances by voice recognition which offers high attention among public.

Keywords: Android, Bluetooth, Voice recognition, ARM 11.

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9-13

4.

Authors:	**Indraneel Guha, Rashmi Adatkar, Dinesh Patel, Paresh Vaghasiya**
Paper Title:	**Wireless Restaurant Ordering System**

Abstract: Conventional method that usually been used in restaurant is by taking the customer's orders. The project was proposed with the ZigBee technology as the communication medium and peripheral interface controller (pic) as the hardware which implements faster ordering system. The aim for this project is to build and design both hardware and software for the ordering and delivering system at restaurants by using keypad, display screen via ZigBee communication. The project also targeted to receive information that works around 50m away with the specific location. The project was able to solve the lack number of the worker, reduce the lateness and the error on ordering foods by the customers. For the future target, using touch screen display and compress the device to more compact device are recommended as the nowadays demand to interact young generation for using this system.

Keywords: ZigBee, PIC, Wireless Sensing Network, Touch technology.

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14-16

5.

Authors:	**Sarita Chauhan, Aakashdeep Sharma, Abhishek Brahmabhatt, Namrata Singh, Puneet Sharma**
Paper Title:	**Comparative Study of ANFIS-Based Wrapper Model for Classification of Cancer and Normal Genes on Microarray Gene Expression Data**

Abstract: A novel way to enhance the performance of a model that combines genetic algorithms and neuro fuzzy logic for feature selection and classification is proposed. This research work involves designing a framework that incorporates genetic algorithm with neuro fuzzy for feature selection and classification on the training dataset. It aims for reducing several medical errors and provides better prediction of diseases. Medical diagnosis of diseases is an important and difficult task, and a proposed method performs feature selection and parameters setting in an

17-21

evolutionary way. The wrapper approach to feature subset selection is used in this paper because of the accuracy. The performance of the ANFIS classifier was evaluated in terms of training performance and classification accuracy. The objective of this research is to simultaneously optimize the parameters and feature subset without degrading the ANFIS classification accuracy.ANFIS is compared with three other classifiers which are Support Vector Machine (SVM), K-Nearest Neighbour (KNN) and Classification And Regression Trees (CART). ANFIS gives the best results for original data of all the datasets and the predictions for noisy data are adequate in comparison with three others classifiers.

Keywords: ANFIS; Feature Selection; ; Cancer Classification.

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	Authors:	**Sarita Chauhan, Anshita Arya, Laxmi Bagri, Raveena Sharma, Shikha Gupta**
	Paper Title:	**Intensity Controlled by Touch Capacitive Sensor Built with Interfacing CNFET Characteristics**

Abstract: Intensity controller plays vital role in todays life as it has numerous applications such as it reduces energy consumption, it can be used to control intensity of many devices such as light, fan, can be used in false ceiling, mood lighting etc. . In our paper we have implemented a light intensity dimmer whose intensity is controlled by characteristics of CNFET. We are soon going to reach hard limit of Silicon chip so we need a new technology to replace it. Here CNFET emerges as best alternative. Applications based on low power utility such as sensing are becoming increasingly important and are in demand in terms of minimizing energy consumption, promoting the search for new and innovative interface architectures and technologies. Carbon-nanotube FETs (CNFETs) has emerged as a new technology for further energy reduction. CNFET has various features such as process robustness, low power consumption,low voltage capability,smaller chip area.In this paper we are presenting a device whose intensity is changed repeatively by a touch capacitive sensor.

Keywords: Carbon nanotube FET (CNFET), sensor interface circuit, matlab.

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6. **22-26**

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Authors: **S. Anitha Shree, J. Dhiviya Rose, M. Sumitha**

Paper Title: **RFID and GSM Based Intelligent Parking System**

Abstract: The parking of vehicles in big parking spaces like shopping complexes, office complexes and other types of building that requires large parking space needs proper planning. There is a need to address the visitors to notify occupied and non occupied parking spaces. Most of the visitors lose their valid time up-to 30 to 45 minutes just to find an empty parking space. Some of the existing parking space systems offered using image processing technology process the brown rounded image drawn at parking lot and produce the information about the empty parking spaces. However, this type of technique is expensive in order to install and to be maintained. In this project, we have developed a unique solution by providing cost effective solution using internet of things. Our system improvises upon the existing parking system by enhancing its security features and automating the parking process thus eliminating the need for manual intervention. Here for authentication and owners identification the parking system has RFID card reader which is the part of recent IOT technology. Instead of using maintain cable ,we developed a system that uses wireless technology like GSM and messages that could help the visitor to notify empty and non empty parking spaces. The space management and identification is performed with the help of an ARM microcontroller which controls the sensors and send ASM message to visitor to park the vehicle at an appropriate parking location.

Keywords: IOT, RFID, ASM, ARM microcontroller.

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27-31

8.

Authors: **Sarita Chauhan, Bahadur Singh, Bhajanlal Vishnoi, Subhash Saini, Vikas Kala**

Paper Title: **Emulation of Artificial Neural Network on an FPGA-based Accelerator using CYCLONE II**

Abstract: Analog VLSI circuits are being used successfully to implement Artificial Neural Networks (ANNs). These analog circuits exhibit nonlinear transfer function characteristics and suffer from device mismatches, degrading network performance. Because of the high cost involved with analog VLSI production, it is beneficial to predict implementation performance during design. We used hardware timemultiplexing to scale network size and maximize hardware usage. An on-chip CPU controls the data flow through various memory systems to allow for large test sequences.We show that Block-RAM availability is the main implementation bottleneck and that a trade-off arises between emulation speed and hardware resources. However, we can emulate large amounts of synapses on an FPGA with limited resources. We have obtained a speedup of 30.5 times with respect to an optimized software implementation on a desktop computer.

Keywords: Artificial neural networks, analog VLSI emulation, FPGA-based accelerators, hardware time multiplexing, embedded systems.

32-39

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Authors: **M. A. Gopalan, S. Vidhyalakshmi, E. Premalatha**

Paper Title: **Special Pairs of Pythagorean Triangle**

Abstract: We illustrate the different methods of obtaining pairs of Pythagorean triangles which are such that, in each pair, the sum of the product of their generators is a perfect square. Also a few interesting properties among the pairs of Pythagorean triangles and special polygonal numbers are exhibited.

Keywords: Pair of Pythagorean triangles, special polygonal numbers.

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40-42

10.

Authors: **Nishan Patnaik**

Paper Title: **DOA Estimation Algorithm for Smart Antennas-An Investigation**

Abstract: High resolution direction-of-arrival (DOA) estimation is important in many applications and over the years many techniques have been proposed. The signal subspace method (MUSIC) [1] has been the most popular and is known to yield asymptotically unbiased and efficient estimates. The MUSIC algorithm estimates the signal subspace from the array measurements and then estimates the parameters of interest from the intersections between the array manifold and the estimated signal. In this work DOA estimation based on MUSIC algorithm and

43-47

improved MUSIC algorithm is investigated. The classical MUSIC algorithm is analyzed and results of simulations using Matlab are presented. Results for the DOA estimation of the noncoherent signals and coherent signals are found.

Keywords: MUSIC, Beamforming, direction-of-arrival (DOA), eigen-decomposition.

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11.	**Authors:**	**K. Sangeetha, A. M. Natarajan**
	Paper Title:	**Intellisense Cluster Management and Energy Efficient Routing in Mobile Ad Hoc Networks**

Abstract: Mobile ad hoc network (MANET) is a collection of distributed nodes which communicate using multi-hop wireless links with frequent node mobility. The goal for ad hoc networks is to accommodate light weight, battery powered portable devices. Because of the finite power limitation, we have to design efficient ways to use the existing power. For a networking device, significant power is consumed for communications and more specifically for transmissions. A first step towards efficient utilization of power is to maintain the topology and control the transmission range. For maintaining the topology a new clustering scheme is developed considering the cluster coefficient and degree of the nodes. The transmission ranges of the nodes are controlled for avoiding more power consumption. The proposed intellect clustering algorithm is compared with one of the distributed weighted clustering algorithm. The method of clustering is more efficient to the latter and the variable transmission range is adopted to control the utilization of power. The proposed method improves the modeling of ad hoc networks and the serves as good foundation for formation of ad hoc networks.

Keywords: Clustering, cluster coefficient, energy conservation, node degree, transmission range.

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48-52

13.	**Authors:**	**Sneha Kulkarni, Sunil Sontakke**
	Paper Title:	**Power System Analysis of a Microgrid using ETAP**

Abstract: Due to evolution in the power system, the development of smaller generating systems such as micro turbines, Wind Turbines, Solar PV system, etc., have opened new opportunities for onsite power generation which is located at user's site called Distributed Energy Resources (DER). The significant potential of DER to meet customers need and utilities independently can be captured by organizing these resources into Microgrid. Power System study and analyses are mandatory parts of power system engineering. This paper deals with a Micro Grid simulation in Electrical Transient Analyzer Program (ETAP). This paper is focused on the detailed analyses by using the most modern software ETAP, which performs numerical calculations of large integrated power system with fabulous speed besides, generating output reports which will be helpful in implementation of a Microgrid system. In this software, Off-line monitoring is made which includes current flowing in every branch, power factor, active and reactive power flow, short circuit analysis and harmonic distortion etc. of large power system. Based upon the recorded data obtained from an actual Microgrid which has been implemented in ETAP for Off-line monitoring and analyses.

Keywords: DER, DG, ETAP, Microgrid, Distributed Generation, Load flow, Introduction.

53-57

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14.

Authors: **Shruti Kametkar, Priyanka Deshmukh, Sarang Paithankar, Mrityunjay Ojha, Shweta Tripathi**

Paper Title: **School Bus Tracking System**

Abstract: Tracking school buses and students has become an important issue due to the decision of whether it would be quicker to wait for the arrival of school bus or to hire a cab/rickshaw as the bus is late/missed to reach school. The proposed system intends to aid in the bus arrival intimation by bringing in an application that will help in successfully tracking the school bus and the child. This application is used to track the current location of the school bus by parents and the school authorities. The proposed systems also include intimation to parents about their child boarding the school bus. This system uses a GPS tracker which is in built in the android phone along with the RFID reader in the school bus. The tracker is used for locating the current geographic position of the bus and RFID (Radio Frequency Identification Device) is used to uniquely identify child that has subscribed for the intimation service. This system uses a database to store the details about the bus route, bus details and children. Although the system proposes to be used for a school bus tracking, it can also be implemented for private/public bus services.

Keywords: GPS, RFID, School, System, bus.

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58-61