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1.	**Authors:** S. R. Patil, Prachi Shewale, Aditi Agrawal, Vandana Choudhari, Balika Doke **Paper Title:** Real Time Data Processing for Detection of Apnea using Android Phone	1-5

Abstract: Sleep apnea (or sleep apnoea in British English) is a type of sleep disorder characterized by pauses in breathing or instances of shallow or infrequent breathing during sleep. Each pause in breathing, called an apnea, can last from at least ten seconds to several minutes, and may occur 5 to 30 times or more an hour. Similarly, each abnormally shallow breathing event is called a hypopnea. Sleep apnea is often diagnosed with an overnight sleep test called a polysomnogram, or "sleep study". The final diagnosis of sleep apnea is established by an overnight polysomnography (PSG) that involves the recording and the studying of several neurologic and cardio-respiratory signals. Those PSGs are carried out in sleep laboratories with attending systems and specialized staff. Because these studies are expensive, it is very relevant to find reliable diagnostic alternatives using fewer biological signals and providing a high level of usability. Identifying the presence of sleep apneas from blood oxygen saturation signal fragments taken from pulsioximetry systems (SPO2). In order to build the classifier, all the methods with which we worked were trained and tested with annotated SpO2 signals available in the Apnea-ECG Database. Another additional requirement we considered was that the classifier should run in real time using, at each particular moment, past information in the SpO2 signal and not information contained in the whole signal. Moreover, we implemented a monitoring system that detects apneic events in real time while the patient is sleeping, which can be sometimes used as a valid alternative to PSGs. This monitoring system constitutes of a desktop application consisting historical database and a mobile device in which our apnea classifier runs performing a local real-time analysis that allows the system to take an active role in the monitoring process. This system can also record patients' nocturnal pulsioximetry and send data to a specific health center to be evaluated by qualified medical staff.

Keywords: Data mining, real-time monitoring, sleep apnea and hypopnea syndrome (SAHS) detection, SpO2 signal analysis.

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2.	**Authors:** Hossein Niavand, MojtabaTajeri **Paper Title:** Statistical Control Process: A Historical Perspective	6-9

Abstract: One of the most powerful tools in thestatistical quality process is the statisticalmethods.First developed in the 1920's byWalter Shewhart, the control chart found widespread use during World War II and has been employed, with various modifications, ever since. There are many processes in which thesimultaneous monitoring or control of two ormore quality characteristics is necessary. Reviewing statistical process control tools and providing a description about necessity of using these tools for improving the production process and providing some applications of statistical process control.This study covers both the motivation for statistical quality process and a discussion of some of the techniques currently available. The emphasis focuses primarily on the developments occurring since the mid-980's.

Keywords: Statistics, quality control, shewhartchart, control chart, praetorchart, diagram.

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	Authors:	**Muthulakshmi G, Revathi S**
	Paper Title:	**VLSI Implementation of Delayed LMS Adaptive Filter with Efficient Area-Power-Delay**

Abstract: In this paper, we present an efficient architecture for the implementation of a delayed least mean square Adaptive filter. For achieving lower adaptation-delay and area-delay-power, we use a novel partial product generator and propose an optimized balanced pipelining across the time-consuming combinational blocks of the structure. From synthesis results, we find that the proposed design with less area-delay product (ADP) and less energy-delay product (EDP) than the best of the existing systolic structures, for various filter lengths. We propose an efficient fixed-point implementation scheme in the proposed architecture. We present here the optimization of design to reduce the number of pipeline delays along with the area, sampling period, and energy consumption. The proposed design is found to be more efficient in terms of the power-delay product (PDP) and energy-delay product (EDP) compared to the existing structures.

Keywords: Adaptive filters, Adder tree optimization, fixed-point arithmetic, least mean square (LMS) algorithms.

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	Authors:	**Poonam Bobade, Seematai Wadekar, Nisha Pagare, K. S. Warke**
	Paper Title:	**Defeating Attacks in Cloud Computing**

Abstract: As vulnerabilities keep increasing exponentially every year, the need to efficiently classify, manage, and analyze them also increases. As more and more users, becomes very important to have proper vulnerability management in cloud. In this paper presentation of vulnerability management framework for cloud computing is represented. Cloud computing is a new environment in computer

oriented services. It is not an easy task to securely maintain all essential data where it has the need in many applications for clients in cloud. To maintain our data in cloud, it may not be fully trustworthy because client doesn't have copy of all stored data. Therefore the security is the biggest problem of this system, because the services of cloud computing is based on the sharing. So, the preventive measures of, the different types of attacks in cloud computing services is described.

Keywords: Cloud Computing, D-DOS, IP Spoofing, Malware, Security, Vulnerability.

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5.

Authors:	**Sonal Dubey, R. K. Pandey, S. S. Gautam**
Paper Title:	**Development of Multimedia Fuzzy Based Diagnostic Expert System for Integrated Disease Management in Chickpea**

Abstract: One of the most important branches of Artificial Intelligence are the expert systems. Expert systems are application oriented. . An expert system is a computer application that solves complicated problems that would otherwise require extensive human expertise. It can be operated by a less educated person or a layman in a particular field of knowledge. It uses the knowledge of the domain expert to form rules to assist in decision making depending on the inputs given by the user. Chickpea (Cicer arietinum L) is the second most important cool season legume crop. It is mainly grown in tropical, sub-tropical and temperate regions, as rainfed in semi arid regions. there is a tremendous scope for increasing the productivity of chickpea by reducing the production losses thereof caused by serious insect pests and diseases causing up to 100 % losses during epidemic years. . For better management of the pest, effective integrated disease and insect management techniques have to be followed for increasing crop production. Expert systems play an important role in supporting farmers to practice effective integrated disease and insect management techniques and taking decisions on crop protection where the experts are not available. Since Fuzzy logic can effectively handle vagueness and inperfect data, it is widely used in diagnosis of diseases in agriculture. This paper describes the fuzzy expert system for integrated disease management in chickpea taking into account the environmental factors like soil moisture, temperature, soil pH, relative humidity in the first step. In the second step identification based on symptoms and photos are taken into consideration and a conclusion is drawn about the diseases attacking the crop.

Keywords: Chickpea, environmental factors fuzzy expert system, integrated disease management.

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6.	**Authors:**	**A. S. Devare, M. P. Wankhade**
	Paper Title:	**Dynamic Channel Allocation Using ARS and BFS- CA in WMN**

Abstract: Traditionally in wireless networks, nodes were operating with a single radio, due to the cost associated with having multiple radios on a node, which was high. Several methods were proposed which aimed to improve the network throughput, for single-radio wireless mesh networks. However, with lowering costs, it has become possible to equip a node with multiple radios. Having multiple radios on a node opens several possibilities and options as to how these radios can be utilized to improve some of the important characteristics of the nodes and the performance of the network. Several interesting studies have been performed on multi-radio nodes and have concluded that in some cases, having multiple radios can considerably improve the throughput and network performance. In this we use the concept of a multi-radio mesh node to analyze the performance of wireless mesh networks in different conditions with different channel assignment schemes. We look at new ways to try and improve the network throughput in wireless mesh networks performance, such as delay, bandwidth, probability of packet loss, delay variance (jitter), and throughput.

Keywords: IEEE 802.11, multiradio wireless mesh networks(mr-WMNs), E-ARS, BFS-CA networks, wireless link failures.

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