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S. No		Page No.
1.	**Authors:** K.J.S Lorraine, K.Bala Teja, G. Durga Devi, K.Harika **Paper Title:** Comparative Analysis of Various Edge Detection Techniques and Cancer Cell Detection using Sobel Algorithm	1-4

Abstract: Image Edge detection significantly reduces the amount of data and filters out useless information, while preserving the important structural properties in an image. Since edge detection is in the forefront of image processing for object detection, it is crucial to have a good understanding of edge detection algorithms. In this paper, the comparative analysis of various Image Edge Detection techniques has been presented. It has been shown that the canny edge detection algorithm performs better than all these algorithms under almost all scenarios. However, it has been observed that under noisy conditions Sobel algorithm detect edges more clearly when compared to Canny. It has been also observed that Canny edge detection algorithm is computationally more expensive compared to Sobel, Prewitt and Robert's algorithms. Cancer is a disease characterized by uncontrolled growth of abnormal cells. Hence, it is necessary to detect the edges of cancer cells so that they can be easily subjected to radiation therapy without affecting the other blood cells. So, in this paper Sobel & Canny algorithms have been used to detect the boundaries of cancer cells. Sobel algorithm has detected the edges of cancer cells more clearly compared to Canny algorithm.

Keywords: Kernels, Gradient, Roberts, Sobel, Prewitt, Canny.

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2.	**Authors:** Gursewak Singh, Rajni Bedi **Paper Title:** A Survey of Various Attacks and Their Security Mechanisms in Wireless Sensor Network	5-8

Abstract: Wireless Sensor Network (WSN) is an emerging technology with the purpose of demonstrating immense promise for various innovative applications such as traffic surveillance, building, smart homes, habitat monitoring and many more scenarios. The sensing technology joint with dispensation control and wireless communication makes it beneficial for being exploited excess in future. The addition of wireless communication technology as well acquires a variety of security threats. The intention of this paper is to examine the security related problems and challenges in wireless sensor networks. This paper discusses a broad diversity of attacks in wireless sensor network and their classification mechanisms and different security schemes available to handle them as well as the challenges faced.

Keywords: Wireless Sensor network, Security schemes, Attacks

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Sensor Networks (REALWSN'05), 20-21 June, 2005, Stockholm, Sweden.

3.

Authors: **Vishal Vaidya, P.P. Hujare**

Paper Title: **Optimization of Sound Pressure Level of Air Intake System by using GT-Power**

Abstract: This paper focuses on the use of GT Power software for optimizing the sound pressure level (SPL) of an air intake system. There are different ways for optimizing the sound pressure level and that can be explored by using the capabilities of the GT Power software. One of the ways for sound pressure level reduction is with increase in transmission loss. This papers talk about the resonator size determination to reduce the SPL. To determine exact volume calculation GT-Power software is used.

Keywords: Air intake system, Resonator, GT Power Acoustics Simulation

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9-11

4.

Authors: **Jitendra Kumar Gothwal, Ram Singh**

Paper Title: **Applying Information Hiding into Fingerprint Verification System using Fragile Watermarking Technique**

Abstract: Protection of biometric data & templates is gaining interest and crucial issue for the security of biometric systems. Digital media in these recent days has led to an increase of digital piracy and tampering especially for biometric identification system. Digital watermarking techniques are used to authenticate a source that has been subjected to potential tempering attacks. These attacks are intended to either circumvent the security afforded by the system or to deter the normal functioning of the system. Thus a protective scheme is needed which will preserve fidelity and prevent alterations. This research work had proposed an architectural framework that will apply information hiding method into biometric identification system. A Fragile image watermarking technique has been used to hide additional information into fingerprint images by changing the least significant bit value of a random chosen pixel of the image. The embedded information can be extracted without referencing to the original image. This proposed framework is to be applied in the real environment to authenticate the digital images in the database of fingerprint biometric system so that they can secured from any unwanted attacks such as intention to fraud fingerprint template. The results show that the fingerprint images are not being affected when the watermarking method is implemented and the performance of the fingerprint authentication system is also not affected when the watermarked fingerprint images are used in the system. This study can be use for image authentication especially to detect whether the image has been tampered by image processing such as noise addition and blurring

Keywords: Biometrics, Fingerprint, Information hiding, Fragile watermarking, Authentication systems

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5.

Authors:	**Surabattina Sunanda, Abdul Rahaman Shaik**
Paper Title:	**Energy Efficient Coordinated Cooperative Cache Replacement Algorithms for Social Wireless Networks**

Abstract: Cooperative caching is a technique used in wireless networks to improve the efficiency of information access by reducing the access latency and bandwidth usage.in this paper,we discuss about cooperative caching policies for minimizing electronic content provisioning cost in Social Wireless Networks (SWNET). SWNETs are formed by mobile devices, such as data enabled phones, electronic book readers etc., sharing common interests in electronic content, and physically gathering together in public places. Electronic object caching in such SWNETs are shown to be able to reduce the content provisioning cost which depends heavily on the service and pricing dependences among various stakeholders including content providers (CP), network service providers, and End Consumers (EC).Cache replacement policy plays a significant role in response time reduction by selecting suitable subset of items for eviction from the cache. In addition, this paper suggests some alternative techniques for cache replacement. Finally, the paper concludes with a discussion on future research directions.

Keywords: Data, Caching, Cache Replacement, SWNETs, Cooperative caching, content provisioning, ad hoc networks

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