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1.	**Authors:** Yaser A. Salem **Paper Title:** Performance Study of Piggybacked CDMA/PRMA HAP System	1-8

Abstract: This paper introduces a multiple access scheme called CDMA/PRMA with Piggybacked Reservation, which employ High Altitude Platforms (HAPs) as innovative wireless base station with balanced cell coverage, to achieve higher statistical multiplexing efficiency in the mixed CBR / VBR /ABR (constant, variable, and available bit rate) traffic environment. The idea is to use HAP as mobile communication assisted system with almost equal paths to communication nodes, while reducing signal impairment. The adopted scheme exploits reservation access mechanism. The reservation is assigned in a separate slice of the frame (reservation mini frame) while the rest of the frame is allotted to the communication traffic. The second level exploits the piggybacked reservation with multimode video encoder to deal with the dynamic nature of VBR traffic in order to increase the channel access efficiency. The expediency of the adopted schemes is insured through the simulation of an isolated cell environment. The obtained results indicated that, a substantial increase in the number of heterogeneous users is attained within the intended QoS level.

Keywords: CDMA, PRMA, HAPs, Stratospheric, Communication.

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Authors:	**Ankita B. Kolhe, P. S. Choudhary**	
Paper Title:	**Intelligent Household LED Lighting System Considering User Satisfaction and Energy Saving**	

2.

Abstract: This paper aims to provide experiences from field tests using wireless technologies and the associated solutions, for energy management of household appliances. The system saves energy by maximizing the use of daylight, capable of controlling lights, fans in a room. All these parameters are measured through various sensors and the controlling is done by microcontroller. The system itself consumes very low power and helps in saving a significant amount of energy. The system can be applied to government offices, private firms, residential buildings, schools; colleges etc. so as to avoid the wastage of electricity and maximum use of day lighting, also reduces our dependence on conventional energy and will help in conserving energy. The system architecture is described and experimental results are provided for monitoring and intelligent control of home appliances, enabling demand response in real-time.

Keywords: Energy Efficiency, Home Automation, Situation Awareness, User Satisfaction.

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3.

Authors: **N.T. Bhagat, A. H. Deshmukh**

Paper Title: **Nonlinear (Pushover) Analysis of Steel frame with External Bracing**

Abstract: Steel is by far most useful material for building construction in the world and in last decades steel structure has played an important role in construction industry. Providing strength, stability and ductility are major purposes of seismic design. It is necessary to design a structure to perform well under seismic loads. In this paper nonlinear pushover analysis is carried out for high rise building steel frame with different pattern of External bracing. The shear capacity of the structure can be increased by introducing steel bracing in structural. There is 'n' number of possibilities to arrange steel bracing for Ex. Diagonal, X, K, V Inverted V. A typica12th- story regular steel frame having 'V' zone building is designed for various types of concentric bracings like Diagonal, V, X, and Exterior X in that 'X' Bracing are more effective. So result shows effective bracing only using STAAD PRO for bracing using different types of material sections i.e. ISMB, ISMC and ISA or any tubular or hollow sections are used to compare for same patterns of bracin.

Keywords: Typical steel frame, exterior bracing Tube or ISMB or ISA or ISMC, Pushover Curve.

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4.

Authors: **I. I. Sayyad, S. M. Hon, K. K. Joshi, P. N. Kolase, Omkar Babasaheb Kale**

Paper Title: **Vibration Analysis of Thick Plate by Using Refined Plate Theory and ANSYS**

Abstract: Refined plate theory is applied for free vibration analysis of thick plate for better results and greater accuracy. In this paper vibration analysis of thick isotropic plate is carried out and results are compared with the results of ANSYS APDL (14.5). This theory uses sinusoidal function in terms of thickness coordinate and accounts for realistic variation of the transverse shear stress through the thickness and satisfies the shear stress free surface conditions at the top and bottom surfaces of the plate. Simply supported thick isotropic plate is considered for detail numerical study. Navier's solution technique is used for the analytical solution. The results are obtained for natural bending mode frequencies. ANSYS APDL 14.5 is used to obtain fundamental frequencies in Modal Solution.

Keywords: Natural Frequencies, ANSYS, Shear Correction Factor, Shear Deformation, Transverse Shear Stress, Modal analysis.

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5.	**Authors:**	**Shital L. Bansod, Sonal Honale**
	Paper Title:	**Review on Enhanced Multi-Queue Packet Schedular Scheme for Wireless Sensor Network**

Abstract: Wireless sensor network (WSN) applications heavily rely on information being transmitted in a timely manner. In such sensor networks, packet scheduling plays a vital role in reducing end-to-end data transmission delays. Developing packet scheduling algorithms in wireless sensor networks can efficiently enhance delivery of packets through wireless links. Packet scheduling can guarantee quality of service and improve transmission rate in wireless sensor networks. It is the process used to select which packet to be serviced or which to be dropped based on the priority such as real time packet and non-real time packet. This paper deals with various packet scheduling algorithms. Wireless sensor network has a different packet scheduling strategy and each has their own advantage and disadvantage. This paper brings a survey on algorithm which provides priority based scheduling and its application.

Keywords: Wireless Sensor Network, Packet scheduling scheme, Non-preemptive priority scheduling, Preemptive pocket scheduling scheme, Real-time, Non-Real-time.

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