Volume 2 Issue 5, April 2015

International Journal of Advanced Engineering and Nano Technology





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

22, First Floor, ShivLoke Phase-IV, Khajuri Kala, BHEL-Piplani, Bhopal (M.P.)-462021, India Website: <u>www.blueeyesintelligence.org</u> Email: <u>director@blueeyesintelligence.org</u>, <u>blueeyes@gmail.com</u> Cell #: +91-9669981618, WhatsApp #: +91-9669981618, Viber #: +91-9669981618 Skype #: beiesp, Twitter #: beiesp

Editor In Chief

Dr. Shiv K Sahu Ph.D. (CSE), M.Tech. (IT, Honors), B.Tech. (IT) Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal (M.P.), India

Dr. Shachi Sahu

Ph.D. (Chemistry), M.Sc. (Organic Chemistry) Additional Director, Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., Bhopal(M.P.), India

Vice Editor In Chief

Dr. Vahid Nourani Professor, Faculty of Civil Engineering, University of Tabriz, Iran

Prof. (Dr.) Anuranjan Misra

Professor & Head, Computer Science & Engineering and Information Technology & Engineering, Noida International University, Noida (U.P.), India

Chief Advisory Board

Prof. (Dr.) Hamid Saremi

Vice Chancellor of Islamic Azad University of Iran, Quchan Branch, Quchan-Iran

Dr. Uma Shanker

Professor & Head, Department of Mathematics, CEC, Bilaspur(C.G.), India

Dr. Rama Shanker

Professor & Head, Department of Statistics, Eritrea Institute of Technology, Asmara, Eritrea

Dr. Vinita Kumari

Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd., India

Dr. Kapil Kumar Bansal

Head (Research and Publication), SRM University, Gaziabad (U.P.), India

Dr. Deepak Garg

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India, Senior Member of IEEE, Secretary of IEEE Computer Society (Delhi Section), Life Member of Computer Society of India (CSI), Indian Society of Technical Education (ISTE), Indian Science Congress Association Kolkata.

Dr. Vijay Anant Athavale

Director of SVS Group of Institutions, Mawana, Meerut (U.P.) India/ U.P. Technical University, India

Dr. T.C. Manjunath

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

Dr. Kosta Yogeshwar Prasad

Director, Technical Campus, Marwadi Education Foundation's Group of Institutions, Rajkot-Morbi Highway, Gauridad, Rajkot, Gujarat, India

Dr. Dinesh Varshney

Director of College Development Counceling, Devi Ahilya University, Indore (M.P.), Professor, School of Physics, Devi Ahilya University, Indore (M.P.), and Regional Director, Madhya Pradesh Bhoj (Open) University, Indore (M.P.), India

Dr. P. Dananjayan

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry,India

Dr. Sadhana Vishwakarma

Associate Professor, Department of Engineering Chemistry, Technocrat Institute of Technology, Bhopal(M.P.), India

Dr. Kamal Mehta

Associate Professor, Deptment of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

Dr. CheeFai Tan

Faculty of Mechanical Engineering, University Technical, Malaysia Melaka, Malaysia

Dr. Suresh Babu Perli

Professor & Head, Department of Electrical and Electronic Engineering, Narasaraopeta Engineering College, Guntur, A.P., India

Dr. Binod Kumar

Associate Professor, Schhool of Engineering and Computer Technology, Faculty of Integrative Sciences and Technology, Quest International University, Ipoh, Perak, Malaysia

Dr. Chiladze George

Professor, Faculty of Law, Akhaltsikhe State University, Tbilisi University, Georgia

Dr. Kavita Khare

Professor, Department of Electronics & Communication Engineering., MANIT, Bhopal (M.P.), INDIA

Dr. C. Saravanan

Associate Professor (System Manager) & Head, Computer Center, NIT, Durgapur, W.B. India

Dr. S. Saravanan

Professor, Department of Electrical and Electronics Engineering, Muthayamal Engineering College, Resipuram, Tamilnadu, India

Dr. Amit Kumar Garg

Professor & Head, Department of Electronics and Communication Engineering, Maharishi Markandeshwar University, Mulllana, Ambala (Haryana), India

Dr. T.C.Manjunath

Principal & Professor, HKBK College of Engg, Nagawara, Arabic College Road, Bengaluru-560045, Karnataka, India

Dr. P. Dananjayan

Professor, Department of Department of ECE, Pondicherry Engineering College, Pondicherry, India

Dr. Kamal K Mehta

Associate Professor, Department of Computer Engineering, Institute of Technology, NIRMA University, Ahmedabad (Gujarat), India

Dr. Rajiv Srivastava

Director, Department of Computer Science & Engineering, Sagar Institute of Research & Technology, Bhopal (M.P.), India

Dr. Chakunta Venkata Guru Rao

Professor, Department of Computer Science & Engineering, SR Engineering College, Ananthasagar, Warangal, Andhra Pradesh, India

Dr. Anuranjan Misra

Professor, Department of Computer Science & Engineering, Bhagwant Institute of Technology, NH-24, Jindal Nagar, Ghaziabad, India

Dr. Robert Brian Smith

International Development Assistance Consultant, Department of AEC Consultants Pty Ltd, AEC Consultants Pty Ltd, Macquarie Centre, North Ryde, New South Wales, Australia

Dr. Saber Mohamed Abd-Allah

Associate Professor, Department of Biochemistry, Shanghai Institute of Biochemistry and Cell Biology, Yue Yang Road, Shanghai, China

Dr. Himani Sharma

Professor & Dean, Department of Electronics & Communication Engineering, MLR Institute of Technology, Laxman Reddy Avenue, Dundigal, Hyderabad, India

Dr. Sahab Singh

Associate Professor, Department of Management Studies, Dronacharya Group of Institutions, Knowledge Park-III, Greater Noida, India

Dr. Umesh Kumar

Principal: Govt Women Poly, Ranchi, India

Dr. Syed Zaheer Hasan

Scientist-G Petroleum Research Wing, Gujarat Energy Research and Management Institute, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan, Gandhinagar-382007, Gujarat, India.

Dr. Jaswant Singh Bhomrah

Director, Department of Profit Oriented Technique, 1 - B Crystal Gold, Vijalpore Road, Navsari 396445, Gujarat. India

Technical Advisory Board

Dr. Mohd. Husain

Director. MG Institute of Management & Technology, Banthara, Lucknow (U.P.), India

Dr. T. Jayanthy

Principal. Panimalar Institute of Technology, Chennai (TN), India

Dr. Umesh A.S.

Director, Technocrats Institute of Technology & Science, Bhopal(M.P.), India

Dr. B. Kanagasabapathi

Infosys Labs, Infosys Limited, Center for Advance Modeling and Simulation, Infosys Labs, Infosys Limited, Electronics City, Bangalore, India

Dr. C.B. Gupta

Professor, Department of Mathematics, Birla Institute of Technology & Sciences, Pilani (Rajasthan), India

Dr. Sunandan Bhunia

Associate Professor & Head,, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Jaydeb Bhaumik

Associate Professor, Dept. of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Rajesh Das

Associate Professor, School of Applied Sciences, Haldia Institute of Technology, Haldia, West Bengal, India

Dr. Mrutyunjaya Panda

Professor & Head, Department of EEE, Gandhi Institute for Technological Development, Bhubaneswar, Odisha, India

Dr. Mohd. Nazri Ismail

Associate Professor, Department of System and Networking, University of Kuala (UniKL), Kuala Lumpur, Malaysia

Dr. Haw Su Cheng

Faculty of Information Technology, Multimedia University (MMU), Jalan Multimedia, 63100 Cyberjaya

Dr. Hossein Rajabalipour Cheshmehgaz

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia (UTM) 81310, Skudai, Malaysia

Dr. Sudhinder Singh Chowhan

Associate Professor, Institute of Management and Computer Science, NIMS University, Jaipur (Rajasthan), India

Dr. Neeta Sharma

Professor & Head, Department of Communication Skils, Technocrat Institute of Technology, Bhopal(M.P.), India

Dr. Ashish Rastogi

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

Dr. Santosh Kumar Nanda

Professor, Department of Computer Science and Engineering, Eastern Academy of Science and Technology (EAST), Khurda (Orisa), India

Dr. Hai Shanker Hota

Associate Professor, Department of CSIT, Guru Ghansi Das University, Bilaspur (C.G.), India

Dr. Sunil Kumar Singla

Professor, Department of Electrical and Instrumentation Engineering, Thapar University, Patiala (Punjab), India

Dr. A. K. Verma

Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

Dr. Durgesh Mishra

Chairman, IEEE Computer Society Chapter Bombay Section, Chairman IEEE MP Subsection, Professor & Dean (R&D), Acropolis Institute of Technology, Indore (M.P.), India

Dr. Xiaoguang Yue

Associate Professor, College of Computer and Information, Southwest Forestry University, Kunming (Yunnan), China

Dr. Veronica Mc Gowan

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

Dr. Mohd. Ali Hussain

Professor, Department of Computer Science and Engineering, Sri Sai Madhavi Institute of Science & Technology, Rajahmundry (A.P.), India

Dr. Mohd. Nazri Ismail

Professor, System and Networking Department, Jalan Sultan Ismail, Kaula Lumpur, MALAYSIA

Dr. Sunil Mishra

Associate Professor, Department of Communication Skills (English), Dronacharya College of Engineering, Farrukhnagar, Gurgaon (Haryana), India

Dr. Labib Francis Gergis Rofaiel

Associate Professor, Department of Digital Communications and Electronics, Misr Academy for Engineering and Technology, Mansoura City, Egypt

Dr. Pavol Tanuska

Associate Professor, Department of Applied Informetics, Automation, and Mathematics, Trnava, Slovakia

Dr. VS Giridhar Akula

Professor, Avanthi's Research & Technological Academy, Gunthapally, Hyderabad, Andhra Pradesh, India

Dr. S. Satyanarayana

Associate Professor, Department of Computer Science and Engineering, KL University, Guntur, Andhra Pradesh, India

Dr. Bhupendra Kumar Sharma

Associate Professor, Department of Mathematics, KL University, BITS, Pilani, India

Dr. Praveen Agarwal

Associate Professor & Head, Department of Mathematics, Anand International College of Engineering, Jaipur (Rajasthan), India

Dr. Manoj Kumar

Professor, Department of Mathematics, Rashtriya Kishan Post Graduate Degree, College, Shamli, Prabudh Nagar, (U.P.), India

Dr. Shaikh Abdul Hannan

Associate Professor, Department of Computer Science, Vivekanand Arts Sardar Dalipsing Arts and Science College, Aurangabad (Maharashtra), India

Dr. K.M. Pandey

Professor, Department of Mechanical Engineering, National Institute of Technology, Silchar, India

Prof. Pranav Parashar

Technical Advisor, International Journal of Soft Computing and Engineering (IJSCE), Bhopal (M.P.), India

Dr. Biswajit Chakraborty

MECON Limited, Research and Development Division (A Govt. of India Enterprise), Ranchi-834002, Jharkhand, India

Dr. D.V. Ashoka

Professor & Head, Department of Information Science & Engineering, SJB Institute of Technology, Kengeri, Bangalore, India

Dr. Sasidhar Babu Suvanam

Professor & Academic Cordinator, Department of Computer Science & Engineering, Sree Narayana Gurukulam College of Engineering, Kadayiuruppu, Kolenchery, Kerala, India

Dr. C. Venkatesh

Professor & Dean, Faculty of Engineering, EBET Group of Institutions, Kangayam, Erode, Caimbatore (Tamil Nadu), India

Dr. Nilay Khare

Assoc. Professor & Head, Department of Computer Science, MANIT, Bhopal (M.P.), India

Dr. Sandra De Iaco

Professor, Dip.to Di Scienze Dell'Economia-Sez. Matematico-Statistica, Italy

Dr. Yaduvir Singh

Associate Professor, Department of Computer Science & Engineering, Ideal Institute of Technology, Govindpuram Ghaziabad, Lucknow (U.P.), India

Dr. Angela Amphawan

Head of Optical Technology, School of Computing, School Of Computing, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Dr. Ashwini Kumar Arya

Associate Professor, Department of Electronics & Communication Engineering, Faculty of Engineering and Technology, Graphic Era University, Dehradun (U.K.), India

Dr. Yash Pal Singh

Professor, Department of Electronics & Communication Engg, Director, KLS Institute Of Engg.& Technology, Director, KLSIET, Chandok, Bijnor, (U.P.), India

Dr. Ashish Jain

Associate Professor, Department of Computer Science & Engineering, Accurate Institute of Management & Technology, Gr. Noida (U.P.), India

Dr. Abhay Saxena

Associate Professor&Head, Department. of Computer Science, Dev Sanskriti University, Haridwar, Uttrakhand, India

Dr. Judy. M.V

Associate Professor, Head of the Department CS &IT, Amrita School of Arts and Sciences, Amrita Vishwa Vidyapeetham, Brahmasthanam, Edapally, Cochin, Kerala, India

Dr. Sangkyun Kim

Professor, Department of Industrial Engineering, Kangwon National University, Hyoja 2 dong, ChuncheOnsi, Gangwondo, Korea

Dr. Sanjay M. Gulhane

Professor, Department of Electronics & Telecommunication Engineering, Jawaharlal Darda Institute of Engineering & Technology, Yavatmal, Maharastra, India

Dr. K.K. Thyagharajan

Principal & Professor, Department of Informational Technology, RMK College of Engineering & Technology, RSM Nagar, Thiruyallur, Tamil Nadu, India

Dr. P. Subashini

Assoc. Professor, Department of Computer Science, Coimbatore, India

Dr. G. Srinivasrao

Professor, Department of Mechanical Engineering, RVR & JC, College of Engineering, Chowdavaram, Guntur, India

Dr. Rajesh Verma

Professor, Department of Computer Science & Engg. and Deptt. of Information Technology, Kurukshetra Institute of Technology & Management, Bhor Sadian, Pehowa, Kurukshetra (Haryana), India

Dr. Pawan Kumar Shukla

Associate Professor, Satya College of Engineering & Technology, Haryana, India

Dr. U C Srivastava

Associate Professor, Department of Applied Physics, Amity Institute of Applied Sciences, Amity University, Noida, India

Dr. Reena Dadhich

Prof. & Head, Department of Computer Science and Informatics, MBS MArg, Near Kabir Circle, University of Kota, Rajasthan, India

Dr. Aashis. S. Roy

Department of Materials Engineering, Indian Institute of Science, Bangalore Karnataka, India

Dr. Sudhir Nigam

Professor Department of Civil Engineering, Principal, Lakshmi Narain College of Technology and Science, Raisen, Road, Bhopal, (M.P.), India

Dr. S. Senthil Kumar

Doctorate, Department of Center for Advanced Image and Information Technology, Division of Computer Science and Engineering, Graduate School of Electronics and Information Engineering, Chon Buk National University Deok Jin-Dong, Jeonju, Chon Buk, 561-756, South Korea Tamilnadu, India

Dr. Gufran Ahmad Ansari

Associate Professor, Department of Information Technology, College of Computer, Qassim University, Al-Qassim, Kingdom of Saudi Arabia (KSA)

Dr. R. Navaneetha krishnan

Associate Professor, Department of MCA, Bharathiyar College of Engg & Tech, Karaikal Puducherry, India

Dr. Hossein Rajabalipour Cheshmejgaz

Industrial Modeling and Computing Department, Faculty of Computer Science and Information Systems, Universiti Teknologi Skudai, Malaysia

Dr. Veronica McGowan

Associate Professor, Department of Computer and Business Information Systems, Delaware Valley College, Doylestown, PA, Allman China

Dr. Sanjay Sharma

Associate Professor, Department of Mathematics, Bhilai Institute of Technology, Durg, Chhattisgarh, India

Dr. Taghreed Hashim Al-Noor

Professor, Department of Chemistry, Ibn-Al-Haitham Education for pure Science College, University of Baghdad, Iraq

Dr. Madhumita Dash

Professor, Department of Electronics & Telecommunication, Orissa Engineering College, Bhubaneswar, Odisha, India

Dr. Anita Sagadevan Ethiraj

Associate Professor, Department of Centre for Nanotechnology Research (CNR), School of Electronics Engineering (Sense), Vellore Institute of Technology (VIT) University, Tamilnadu, India

Dr. Sibasis Acharya

Project Consultant, Department of Metallurgy & Mineral Processing, Midas Tech International, 30 Mukin Street, Jindalee-4074, Queensland, Australia

Dr. Neelam Ruhil

Professor, Department of Electronics & Computer Engineering, Dronacharya College of Engineering, Gurgaon, Haryana, India

Dr. Faizullah Mahar

Professor, Department of Electrical Engineering, Balochistan University of Engineering and Technology, Pakistan

Dr. K. Selvaraju

Head, PG & Research, Department of Physics, Kandaswami Kandars College (Govt. Aided), Velur (PO), Namakkal DT. Tamil Nadu, India

Dr. M. K. Bhanarkar

Associate Professor, Department of Electronics, Shivaji University, Kolhapur, Maharashtra, India

Dr. Sanjay Hari Sawant

Professor, Department of Mechanical Engineering, Dr. J. J. Magdum College of Engineering, Jaysingpur, India

Dr. Arindam Ghosal

Professor, Department of Mechanical Engineering, Dronacharya Group of Institutions, B-27, Part-III, Knowledge Park, Greater Noida, India

Dr. M. Chithirai Pon Selvan

Associate Professor, Department of Mechanical Engineering, School of Engineering & Information Technology Manipal University, Dubai, UAE

Dr. S. Sambhu Prasad

Professor & Principal, Department of Mechanical Engineering, Pragati College of Engineering, Andhra Pradesh, India.

Dr. Muhammad Attique Khan Shahid

Professor of Physics & Chairman, Department of Physics, Advisor (SAAP) at Government Post Graduate College of Science, Faisalabad.

Dr. Kuldeep Pareta

Professor & Head, Department of Remote Sensing/GIS & NRM, B-30 Kailash Colony, New Delhi 110 048, India

Dr. Th. Kiranbala Devi

Associate Professor, Department of Civil Engineering, Manipur Institute of Technology, Takyelpat, Imphal, Manipur, India

Dr. Nirmala Mungamuru

Associate Professor, Department of Computing, School of Engineering, Adama Science and Technology University, Ethiopia

Dr. Srilalitha Girija Kumari Sagi

Associate Professor, Department of Management, Gandhi Institute of Technology and Management, India

Dr. Vishnu Narayan Mishra

Associate Professor, Department of Mathematics, Sardar Vallabhbhai National Institute of Technology, Ichchhanath Mahadev Dumas Road, Surat (Gujarat), India

Dr. Yash Pal Singh

Director/Principal, Somany (P.G.) Institute of Technology & Management, Garhi Bolni Road, Rewari Haryana, India.

Dr. Sripada Rama Sree

Vice Principal, Associate Professor, Department of Computer Science and Engineering, Aditya Engineering College, Surampalem, Andhra Pradesh. India.

Dr. Rustom Mamlook

Associate Professor, Department of Electrical and Computer Engineering, Dhofar University, Salalah, Oman. Middle East.

Managing Editor

Mr. Jitendra Kumar Sen International Journal of Advanced Engineering and Nano Technology (IJAENT)

Editorial Board

Dr. Saeed Balochian Associate Professor, Gonaabad Branch, Islamic Azad University, Gonabad, Iratan

Dr. Mongey Ram

Associate Professor, Department of Mathematics, Graphics Era University, Dehradun, India

Dr. Arupratan Santra

Sr. Project Manager, Infosys Technologies Ltd, Hyderabad (A.P.)-500005, India

Dr. Ashish Jolly

Dean, Department of Computer Applications, Guru Nanak Khalsa Institute & Management Studies, Yamuna Nagar (Haryana), India

Dr. Israel Gonzalez Carrasco

Associate Professor, Department of Computer Science, Universidad Carlos III de Madrid, Leganes, Madrid, Spain

Dr. Guoxiang Liu

Member of IEEE, University of North Dakota, Grand Froks, N.D., USA

Dr. Khushali Menaria

Associate Professor, Department of Bio-Informatics, Maulana Azad National Institute of Technology (MANIT), Bhopal (M.P.), India

Dr. R. Sukumar

Professor, Sethu Institute of Technology, Pulloor, Kariapatti, Virudhunagar, Tamilnadu, India

Dr. Cherouat Abel

Professor, University of Technology of Troyes, France

Dr. Rinkle Aggrawal

Associate Professor, Department of Computer Science and Engineering, Thapar University, Patiala (Punjab), India

Dr. Parteek Bhatia

Associate Professor, Deprtment of Computer Science & Engineering, Thapar University, Patiala (Punjab), India

Dr. Manish Srivastava

Professor & Head, Computer Science and Engineering, Guru Ghasidas Central University, Bilaspur (C.G.), India

S. Io		me-2 Issue-5, April 2015, ISSN: 2347-6389 (Online) d By: Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.	Page No.	
_	Authors:	Yaser A. Salem		
	Paper Title:	Performance Study of Piggybacked CDMA/PRMA HAP System	r	
	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: CDM	IA, PRMA, HAPs, Stratospheric, Communication.		
		WANG, "Comparison of Broadband Wireless Access Technology for HAPS Communication" Sensors &		
2		 I. 166, Issue 3, March 2014, pp. 122-127. Mohorčič," Broadband Communications via High-Altitude Platforms," United Kingdoms: John Wiley and 		
3	3. H.Jengji,W. Wei	iting,F.Hueiwen. "Up-link capacity enhancement for an integrated HAPS-terres-trial CDMA system,". IEEE s Letters,2007,10-12.		
2	high-altitude pla	S. Arnon, D. Grace, M. Mondin, and R. Miura,"Advanced communications techniques and applications for tforms," Editorial for a special issue in EURASIP Journal on Wireless communications and Networking, a, http://www.hindawi.com/journals/wcn/volume-2008/si.7.html, " IEEE Trans. Antennas Propagat., to be		
	 S. H. Alsamhi, Applications" In S. Karapantazis a 	N. S. Rajput ,"An Intelligent HAP for Broadband Wireless Communications: Developments, QoS and ternational Journal of Electronics and Electrical Engineering, Vol. 3, No. 2, April, 2015. and F. Pavlidou, "Broadband communications via high-altitude platforms: a survey," IEEE Communications		
7	7. H. Jeng-Ji, W.	rials, vol. 7, pp. 2-31, 2005. Wei-Ting, and F. Huei-Wen, "Uplink capacity enhancement for an integrated HAPS-terrestrial CDMA Communications Letters, vol. 11, pp. 10-12, 2007		
	 D. Grace, J. The using multiple hi 	ornton, C. Guanhua, G. P. White, and T. C. Tozer, "Improving the system capacity of broadband services igh-altitude platforms," IEEE Transactions on Wireless Communications, vol. 4, pp. 700-709, 2005 . DP., and A. Aragón-Zavala, "High Altitude Platforms for Wireless Communications," United Kingdom:	1-8	
1	10. T. Tozer and A.	Sons, Ltd., 2008. Smith, "High altitude platforms and Milsatcom for future capacity requirements," in Proc. IET Seminar on		
	services," in Pro	Elshaikh, R. Islam, A. Ismail, and O. Khalifa, "High altitude platform for wireless communications and other c. International Conference on Electrical and Computer Engineering, 2006, pp. 432-438.		
	communication t	, A. Singh, A. Kumar. "High Altitude Platforms (HAP) : A Review,", International Journal of electronics & technology, IJECT Vol. 2, Issue 3, sept. 2011, Galajda, "High altitude platform for wireless communications and other services,", Act Electrotecnica, No2,		
	Vol. 7, 2007.	Komar, J. Shekhar, " Network Congestion Control in 4G Technology Through Iterative Server", IJCSI		
	International Jou	irnal of Computer Science Issues, Vol. 9, Issue 4, No 2, July 2012. D. Said," Optimizing Concentric Circular Antenna Arrays for High-Altitude Platforms Wireless Sensor		
1	16. Y Albagory,"	Computer Network and Information Security, 2014, 5, 1-8 Impact of High-Altitude Platforms Rotation on Cellular Mobile Communications", International Journal of		
1	17. M. A. Elghorab, Altitude Platform	buting Research, Volume 1, 2014. A. S. Alkorany, M. I. Dessouky," Handoff Study of Ring Shaped Cellular Configuration Designed for High m Communications", International Journal of Computer Applications (0975 – 8887). Volume 102– No.5,		
1		FN "Call admission control in multiservice high altitude platform (HAP) W-CDMA cellular systems". 1(12):3491–3506		
1	19. J. Huang, W. V	Wang, H. Ferng," Capacity Enhancement for Integrated HAPS-Terrestrial CDMA System", Sensors & J. 166, Issue 3, March 2014, pp. 122-127.		
	2002	S. Tohm, "CDMA/PRMA analytical model for voice users in Satellite-UMTS systems," ICC New York,		
	satellite systems,	 S. Tohm, "A modified CDMA/PRMA medium access control protocol for integrated services in LEO," Mobicom2000 Boston,2000. I. Mertzanis, "Network and MAC issues for mobile satellite multimedia networks," COST-252/253/255 		
	Joint Workshop,	 Mertzanis, Network and MAC issues for mobile satellite multimedia networks, COS1-252/255/255 Toulouse, France, 1999. R. Fantacci and C. Ortolani, "Performance analysis of a PRMA protocol suitable for voice and data 		
	transmissions in 24. A. A. Kofmehl, Access Protocol	low earth orbit mobile satellite systems," IEEE Transactions on wireless communications, 2002. D. Grob, A. Ibrahim, S. Tohme, "Performance Evaluation and Optimization of a CDMA/PRMA Medium for WWW Users in Mobile Networks", International World Wide Web Conference, Budapest Hungary, 20-		
	Transmission in	antacci, G. Giambene, C. Ortolani, "Performance Analysis of a PRMA Protocol Suitable for Voice and Data Low Earth Orbit Mobile Satellite Systems", IEEE Trans. On Wireless Com., vol.1, no.1, January 2002.		
2	 A.E. Brand, H. A & Sons LTD 20 	Aghvami "Multiple Access Protocols for Mobile Communications GPRS, UMTS and Beyond", John Willey		

& Sons, LTD, 2002.
K. Siamitros, N. Dimitriou, R. Tafazolli, "UMTS Coverage Planning Using a High Altitude Platform Station", WMPC

		0000 1157 116	1,000			
	28.	2002, pp.1157-1162 H. Al-Mahdi, H. I	1, 2002. Nassar, Y. Fouad, M. Ali," Design and Analysis of a Channel Assignment Scheme for CDMA-TDMA			
	29.	Taha-Ahmed, B., a	Wireless Pers Commun (2013) 69:579–599 and M. Calvo-Ramón" Multiservice capacity and interference statistics of the uplink of high altitude for asynchronous and synchronous WCDMA system", Annales des Telecommunications, Vol. 67, 503-			
		509.				
		Ashagrie Getnet F	ro, S. Marano, F. Petulla, "Analysis of MAC protocols for wireless-ATM Networks". IEEE'2000. Flattie, "Sky Station Stratospheric Disaster Recovery System by Appling HAPs and Cooperative protocols", 2nd International Conference on Research in Science, Engineering and Technology			
	32	(ICRSET'2014),	and Technical Characteristics for a Terrestrial IMT-2000 System Using High Altitude Platform Stations",			
		Document 8-1/80-E	E, April 1998.			
	33.	B. El-Jabu and R. Steele, "Cellular Communications Using Aerial Platforms", IEEE Trans. on Vehicular Tech., Vol. 50, No. 3, pp: 686–700, 2001.				
	35.	K. Siamitros, N. Dimitriou, R. Tafazolli, "UMTS Coverage Planning Using a High Altitude Platform Station", in Proceedings of the 5 th International Symposium on Wireless Personal Multimedia Communications, 2002, Vol. 3, pp: 1157–1161, Sheraton Waikiki, Honolulu, Hawaii, 27-30 October 2002. Andrew J, Viterbi, "CDMA Principal of spread spectrum communication", Addison-Wesley- 1995				
	36.	generation mobile	rand, A.E.; Aghvami, A.H., "Performance of a joint CDMA/PRMA protocol for mixed voice/data transmission for third eneration mobile communication", Selected Areas in Communications, IEEE Journal on Volume: 14 9, Dec. 1996,			
		 Page(s): 1698 –1707. 37. Brand, A.E.; Aghvami, A.H., "Performance of the joint CDMA/PRMA protocol for voice transmission in a cellular environment ",Communications, 1996. ICC '96, Conference Record, Converging Technologies for Tomorrow's Applications. 1996 IEEE International Conference on Volume: 2, 1996, Page(s): 621 -625 vol.2. 				
	38. L.B. Milstein, et al," On the feasibility of a CDMA Overlay for personal communication networks", IEEE JSAC, VOL May 1992, pp 655-668.					
		Effeciency", Procee	d L.B Milstein," Effects of path loss and fringe user distribution on CDMA Cellular frequency reuse edings of the IEEE Globecom 1990, pp 404.6.1- 404.6.7. eph, and D. Raychaudhuri," Effect of propagation loss coeffecient on the performance of the Packet			
		CDMA PCN", Proc	. PIMRC 1992, Oct. pp 11.6.1 – 11.6.5. nin, Y. W. Lai, Performance evaluation of a joint CDMA/NC-PRMA Protocol for Wireless multimedia			
		communications, IE	EEE Journal on selected areas in comm Vol. 19, No. 1, Jan. 2001, pp 95-106.			
	 S. Lin, "An Introduction to Error-Correcting Codes". Englewood Cliffs, NJ: Prentice-Hall, 1970. Brand, A.E. Aghvami, A.H. "Multidimensional PRMA (MD RMA)-a versatile medium access strategy for the UMTS mobile to base station channel. Personal, Indoor and Mobile Radio Communications", 1997, Waves of the Year 2000 PIMRC '97, The 8th IEEE International Symposium on Volume: 2, 1997, Page(s): 524 -528 vol.2. 					
	Aut	thors:	Ankita B. Kolhe, P. S. Choudhary			
		per Title:	Intelligent Household LED Lighting System Considering User Satisfaction and Saving	d Energy		
	Abs	stract: This pap	er 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					
	mea	asured 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				
	the wastage of electricity and maximum use of day lighting, also reduces our dependence on					
		U	ent offices, private firms, residential buildings, schools; colleges etc. so as to avoid ectricity and maximum use of day lighting, also reduces our dependence on			
	the con	wastage of ele	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and			
	the con exp	wastage of ele	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling			
	the con exp den	wastage of ele wentional energy perimental results nand response in	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling			
	the con exp den Key	wastage of ele wentional energy perimental results nand response in	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time.			
	the con exp den Key	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, J Energy Saving Ap Haesik Kim, Hon	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time.			
2.	the con exp den Key Ref 1.	wastage of ele wentional energy erimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Se	ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling a real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and	9-11		
2.	the con exp den Key Ref 1. 2.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, 1 Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Se Context-aware Sn Jinsoo Han, Char	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling a real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. Iggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011, pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee 	9-11		
2.	the con exp den Key Ref 1. 2. 3.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, 1 Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Se Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee und Infrared RemoteControls", Vol. 57, no.1, February 2011, pg. no. 85-89. 	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Se Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "H	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling a real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. Iggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011,pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol.57, no.2, February 2011,pg. no. 788-793. 	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4. 5.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Sc Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Sens Meng-Shiuan Par	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling in real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee und Infrared RemoteControls", Vol. 57, no.1, February 2011, pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol.57, no.2, February 2011,pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of iors", Vol.28, no.1, January 2013,pg. no.21-28. n, Lun-Wu Yeh, Yen-Ann Chen, Yu-Hsuan Lin, and Yu-Chee Tseng, "A WSN-based Intelligent Light 	9-11		
2.	the connexp den Key den Key Ref 1. 2. 3. 4. 5. 6.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Se Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Sens- Meng-Shiuan Par Control System C Byoungjoo Lee, O	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling a real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. Iggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no. 90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee und Infrared RemoteControls", Vol. 57, no.1, February 2011,pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol.57, no.2, February 2011,pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of tors", Vol.28, no.1, January 2013,pg. no.21-28. 	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4. 5. 6. 7.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon Wireless Access N Jinsung Byun, Sc Context-aware Sn Jinsuo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Senss Meng-Shiuan Par Control System C Byoungjoo Lee, C aware LED Light no.231-239. Seung-Ho Hong,	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. (ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011, pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee und Infrared RemoteControls", Vol. 57, no.1, February 2011, pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol.57, no.2, February 2011, pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of tors", Vol.28, no.1, January 2013, pg. no.21-28. n, Lun-Wu Yeh, Yen-Ann Chen, Yu-Hsuan Lin, and Yu-Chee Tseng, "A WSN-based Intelligent Light 'onsidering User Activities and Profiles", pg. no.1-12. Gwanyeon Kim, Insung Hong, Sehyun Park, Yoonsik Uhm, "Design and Implementation of Powert Enabler with Location-aware Adaptive Middleware and Context-aware User Pattern", January 2010, pg Tae-Jin Park, "Experimental Case Study of a BACnet-Based Lighting Control System", Vol. 6, no. 	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4. 5. 6. 7. 8.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Sc Context-aware Sn Jinsoo Han, Chai Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Senss Meng-Shiuan Par Control System C Byoungjoo Lee, G aware LED Light no.231-239. Seung-Ho Hong, 2,April 2009, pg r Aurora Gil-de-Ca Maria Flores-Aria	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011,pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee und Infrared RemoteControls", Vol. 57, no.1, February 2011,pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol. 27, no.2, February 2011,pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of ors", Vol. 28, no.1, January 2013,pg. no.21-28. n, Lun-Wu Yeh, Yen-Ann Chen, Yu-Hsuan Lin, and Yu-Chee Tseng, "A WSN-based Intelligent Light Considering User Activities and Profiles", pg. no.1-12. Gwanyeon Kim, Insung Hong, Sehyun Park, Yoonsik Uhm, "Design and Implementation of Power-t Enabler with Location-aware Adaptive Middleware and Context-aware User Pattern", January 2010,pg Tae-Jin Park, "Experimental Case Study of a BACnet-Based Lighting Control System", Vol. 6, no. no. 322-333. sitro and Antonio Moreno-Munoz, Francisco Domingo-Perez, Francisco Jose Bellido- Outeirino, Jose as, "Building Lighting Automation through the Integration of DALI with Wireless Sensor Networks", 	9-11		
2.	Image: height of the constraint of the cons	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ap Haesik Kim, Hon, Wireless Access N Jinsung Byun, Sc Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Senss Meng-Shiuan Par Control System C Byoungjoo Lee, C aware LED Light no.231-239. Seung-Ho Hong, 2,April 2009, pg r Aurora Gil-de-Ca Maria Flores-Aria 2012, pg no.47-52 Author Name: A	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011,pg no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol. 57, no.2, February 2011,pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of fors", Vol. 28, no.1, January 2013,pg. no.21-28. n, Lun-Wu Yeh, Yen-Ann Chen, Yu-Hsuan Lin, and Yu-Chee Tseng, "A WSN-based Intelligent Light 'onsidering User Activities and Profiles", pg. no.1-12. Gwanycon Kim, Insung Hong, Sehyun Park, Yoonsik Uhm, "Design and Implementation of Powert Enabler with Location-aware Adaptive Middleware and Context-aware User Pattern", January 2010,pg Tae-Jin Park, "Experimental Case Study of a BACnet-Based Lighting Control System", Vol. 6, no. no. 322-333. astro and Antonio Moreno-Munoz, Francisco Domingo-Perez, Francisco Jose Bellido- Outerino, Jose as, "Building Lighting Automation through the Integration of DALI with Wireless Sensor Networks", 24. A. Schoofs, A. Guerrieri, A.G. Ruzzelli, G.M.P. O'Hare , "ANNOT: Automated Electricity Data 	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, 1 Energy Saving Ar Haesik Kim, Hon, Wireless Access P Jinsung Byun, Sc Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Senss Meng-Shiuan Par Control System C Byoungjoo Lee, C aware LED Light no.231-239. Seung-Ho Hong, 2,April 2009, pg r Aurora Gil-de-Ca Maria Flores-Aria 2012, pg no.47-52 Author Name: A Annotation Using Ying-Wen Bai an	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. (ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and nart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee and Infrared RemoteControls", Vol. 57, no.1, February 2011, pg. no. 85-89. nir ozcelebi and Johan J. Lukkien, "Exploring User-Centered Intelligent Road Lighting Design: A Road Research Directions", Vol.57, no.2, February 2011, pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of ors", Vol.28, no.1, January 2013, pg. no.1-12. Gwanyeon Kim, Insung Hong, Schyun Park, Yoonsik Uhm, "Design and Implementation of Powert Enabler with Location-aware Adaptive Middleware and Context-aware User Pattern", January 2010, pg. Tae-Jin Park, "Experimental Case Study of a BACnet-Based Lighting Control System", Vol. 6, no. no. 322-333. astro and Antonio Moreno-Munoz, Francisco Domingo-Perez, Francisco Jose Bellido- Outeirino, Jose as, "Building Lighting Automation through the Integration of DALI with Wireless Sensor Networks", 2. A. Schoofs, A. Guerrieri, A.G. Ruzzelli, G.M.P. O'Hare , "ANNOT: Automated Electricity Data (Wireless Sensor Networks", 2010. d Yi-Te Ku, "Automatic Room Light Intensity Detectio	9-11		
2.	the con exp den Key Ref 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	wastage of ele wentional energy perimental results nand response in ywords: Energy ferences: Andreas Foglar, I Energy Saving Ar Haesik Kim, Hon Wireless Access N Jinsung Byun, Sc Context-aware Sn Jinsoo Han, Char Communication a Cagdas Atici, Tar Map and Future R Fabio Leccese, "I Devices and Sens Meng-Shiuan Par Control System C Byoungjoo Lee, C aware LED Light no.231-239. Seung-Ho Hong, 2,April 2009, pg r Aurora Gil-de-Ca Maria Flores-Aria 2012, pg no.47-52 Author Name: A Annotation Using Ying-Wen Bai an Sensors", Vol. 54	 ectricity and maximum use of day lighting, also reduces our dependence on y and will help in conserving energy. The system architecture is described and s are provided for monitoring and intelligent control of home appliances, enabling real-time. Efficiency, Home Automation, Situation Awareness, User Satisfaction. Halid Hrasnica, Maurice Draaijer, Nikolaos Mouratidis, Spyridon Tompros, "Enabling Applicability of pplications on the Appliances of the Home Environment", November/December 2009, pg no.8-16. (ggang Zhang, Kari Horneman, Tao Chen, Yang Yang, "Network Energy saving Technologies for Green Networks", October 2011,pg no. 30-38. ehyun Park, "Development of a Self-adapting Intelligent System for Building Energy Saving and mart Services", Vol. 57, no.1, February 2011, pg no.90-98. ng-Sic Choi, and Ilwoo Lee, "More Efficient Home Energy Management System Based on ZigBee and Infrared RemoteControls", Vol. 57, no.1, February 2011,pg. no. 788-793. Remote-Control System of High Efficiency and Intelligent Street Lighting Using a ZigBe Network of ors", Vol.28, no.1, January 2013,pg. no.21-28. n, Lun-Wu Yeh, Yen-Ann Chen, Yu-Hsuan Lin, and Yu-Chee Tseng, "A WSN-based Intelligent Light 'onsidering User Activities and Profiles", pg. no.1-12. Gwanyeon Kim, Insung Hong, Sehyun Park, Yoonsik Uhm, "Design and Implementation of Powert Enabler with Location-aware Adaptive Middleware and Context-aware User Pattern", January 2010,pg Tae-Jin Park, "Experimental Case Study of a BACnet-Based Lighting Control System", Vol. 6, no. no. 322-333. Tae-Jin Park, Guerrieri, A.G. Ruzzelli, G.M.P. O'Hare , "ANNOT: Automated Electricity Data Swireles Sensor Networks", June, 2010. 	9-11		

	Science, Vol. 2, no 14. Hayoung Oh, Hyo Networks", Vol. 15. Jinsoo Han, Haery	te Home Automation System Using Android Application", The International Journalof Engineering And .1, 2013, pg. no. 149-153. okyung Bahn, and Ki-Joon Chae, "An Energy-Efficient Sensor Routing Scheme for Home Automation 51, No. 3, August 2005, pg. no.836-839. yong Lee, and Kwang-Roh Park, "Remote-Controllable and Energy-Saving Room Architecture based on cation", Vol. 55, No. 1, February 2009, pg. no.264-268.	
	Authors:	N.T. Bhagat, A. H. Deshmukh	
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 typical2th- 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. References: 1 Mr. Praveen Thakur, Dr.SureshKushwaha &PrabhatSoni October2014 International Journal of Innovative Research & Development V'Analysis of Nodal Displacement and Beam EndForces for Multistoried Framed Structure" 3 Mr. Mohammed Inters Khan & Mr. Khalid Nayaz Khan July 2014(International Journal of Innovative Research & Development Volume No.03, Issue No. 08, Jugust 2014) 'Seismic Analysis of Steel Frame with Bracing Using Pushover Analysis		
	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 ANSYSAbstract: 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.References:References:		
4.	2. G.R. Kirchhoff, "U Mathematik (Crelle	ber das gleichgewicht und die bewegung einer elastischen Scheibe, Journal für die reine und angewandte 's Journal)," Vol.40, Pp 51-88, 1850. y and analysis of plates-classical and numerical methods," Prentice-Hall Inc., Englewood Cliffs, New	17-21

1	4	E Daissnar "Tha	Effect of transverse Shear Deformation on the Bending Elastic Plate," Transactions of the American		
	4.				
	~		cal Engineers, Journal of Applied Mechanics, Vol. 12, Pp. 6977, 1945.		
	5.		istensen, and E.M. Wu, "A High-Order Theory of Plate Deformation, Part-1: Homogeneous Plates,"		
		ASME Journal of A			
	6.		istensen and E.M. Wu, "A High-Order Theory of Plate Deformation, Part-2: Laminated Plates," ASME		
		Journal of Applied	Mechanics, Vol. 44, Pp.669-676, 1977.		
	7. M. Stein, "Nonlinear Theory for Plates and Shells Including the Effects of Transverse Shearing," AIAA Journal, Vol. 2				
	 Pp.1537-1544, 1986. J.N. Reddy, and N.D. Phan, "Stability and Vibration of isotropic, orthotropic and laminated plates according to higher order shear deformation theory," Journal of Sound and Vibration, Vol. 98, Pp. 157170, 1985. Y.M. Ghugal and A.S. Sayyad, "A static flexure of Thick Isotropic Plates Using Trigonometric Shear Deformation Theory," Journal of Solid Mechanics, Vol.2, Pp.79-90, 2010. A.V. Krishna Murty, "Higher Order Theory for Vibrations of Thick Plates," AIAA Journal, Vol. 15, Pp.1823-1824, 1977. J.N. Reddy, "A simple Higher-order Theory for laminated CompositesPlate," Transaction of the American Society of Mechanical Engineers, Journal Applied Mechanics, Vol. 51, Pp. 745-752, 1984. S. Srinivas, C.V. Joga Rao and A.K. Rao, "Bending, Vibration and buckling simply supported thick orthotropic rectangular plates and laminates," International Journal of Solids and Structures Pp. 6:14631481, 1970. 				
	13. Vanam B. C. L., Rajyalakshmi M. and Inala R.' "Static analysis of an isotropic rectangular plate using finite element				
	15.				
	analysis (FEA)," Journal of Mechanical Engineering Research Vol. 4(4), pp. 148-162, April 2012.				
	14.		Chikhalthankar and Y. M. Nandedkar. "Bending and Free Vibration Analysis of Isotropic Plate Using		
	Refined Plate Theory," Bonfring International Journal of Industrial Engineering and Management Science, Vol. 3, No. 2,				
	June 2013, Pp. 40-46.				
[Authors: Shital L. Bansod, Sonal Honale				
1	Au				
1	D-	non Titles	Review on Enhanced Multi-Queue Packet Schedular Scheme for Wireles	s Sensor	
	Pa	per Title:	Network		
	41	4 4 337' 1			
			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		
1	data transmission delays. Developing packet scheduling algorithms in wireless sensor networks can				
1					
	effi	ciently enhance	delivery of packets through wireless links. Packet scheduling can guarantee quality		
	of	service and impr	ove transmission rate in wireless sensor networks. It is the process used to select		
		-	1		
			serviced or which to be dropped based on the priority such as real time packet and		
	nor	n-real time packe	et. This paper deals with various packet scheduling algorithms. Wireless sensor		
			ent packet scheduling strategy and each has their own advantage and disadvantage.		
	Thi	s paper brings a	survey on algorithm which provides priority based scheduling and its application.		
		11 0			
	17	1 337 1			
	Ке	ywords: Wireles	s Sensor Network, Packet scheduling scheme, Non-preemptive priority scheduling,		
	Pre	emptive pocket s	cheduling scheme, Real-time, Non-Real-time.		
		r r			
	Re	ferences:			
	1.	G. Anastasi, M. Co	nti, and M. Di Francesco, "Extending the lifetime of wireless sensor networks through adaptive sleep,"		
			ial Informatics, vol. 5, no. 3, pp. 351–365, 2009.		
	2.		Molnar, L. Gonczy, and B. Cousin, "Optimal period length for the CQS sensor network scheduling		
	۷.				
	2		2010 International Conf. Netw. Services, pp. 192–199.		
	3.		rpeoglu, "DSSP: a dynamic sleep scheduling protocol for prolonging the lifetime of wireless sensor		
			2007 International Conf. Advanced Inf. Networking Appl., vol.2, pp. 725–730.		
	4.	S. Chachra and M.	Marefat, "Distributed algorithms for sleep scheduling in wireless sensor networks," in Proc. 2006 IEEE		
		International Conf.	Robot. Autom., pp. 3101–3107.		
	5.		2. Zhang, and K. Zhang, "Sleep scheduling for critical event monitoring in wireless sensor networks,"		
	5.		1 Distrib. Syst., vol. 23, no. 2, pp. 345–352, Feb. 2012.		
	6.		Y. J. Zhang, "Joint routing and sleep scheduling for lifetime maximization of wireless sensor networks,"		
_	0.				
5.	~		ss Commun., vol. 9, no. 7, pp. 2258–2267, July 2010.	22-24	
1	7.		5. He, "An energy-aware coverage based node scheduling scheme for wireless sensor networks," in Proc.		
		2008 International			
	8.		ig, and A. Wolisz, "Distributed wakeup scheduling scheme for supporting periodic traffic in wsns," in		
1	6	1	n Wireless Conf., pp. 287–292.		
1	9.		asbullah,"Dynamic sleep scheduling for minimizing delay in wireless sensor network," in Proc. 2011		
1	1		Electron., Communications Photon. Conf., pp. 1–5.		
1	10.	D. Shuman and M.	Liu, "Optimal sleep scheduling for a wireless sensor network node," in Proc. 2006 Asilomar Conf.		
1	1	Signals, Syst. Comp			
	11.		and I. Singh, "A dynamic balanced-energy sleep scheduling scheme in heterogeneous wireless sensor		
			2008 IEEE International Conf. Netw., pp. 1–6, 2008.		
1	12		Hansdah, and V. K. Chouhan, "An energy aware routing protocol with sleep scheduling for wireless		
	12.				
	10		n Proc. 2010 IEEE International Conf. Adv. Inf. Netw. Appl., pp. 933–940.		
	13.		Wu, and K. F. Huang, "A power saving sleep scheduling based on transmission power control for		
			vorks," in Proc. 2011 International Conf. Ubi-Media Comput., pp.19–24.		
	14.		, W. Fu, and D. P. Agrawal, "Hops-based sleep scheduling algorithm for enhancing lifetime of wireless		
	1		Proc. 2006 IEEE International Conf. Mobile Adhoc Sensor Syst., pp. 709-714.		
	15.		K. Wu, B. Sun, Y. Zhang, X. Sun, and C. Liu, "Coverage and detection of a randomized scheduling		
	1		s sensor networks," IEEE Trans. Comput., vol. 59, no. 4, pp. 507-521, Apr. 2010.		
1	16		Bi, and W. Liu, "Adaptive nodes scheduling approach for clustered sensor networks," in Proc. 2009		
1	10.		tt. Commun., pp. 34–39.		
1	17				
1	1/.		Li, and S. Lu, "VBS: maximum lifetime sleep scheduling for wireless sensor networks using virtual		
1			2. 2010 IEEE INFOCOM, pp. 1–5.		
1	18.		and D. Lu, "Cooperation-based scheduling algorithm in wireless multimedia sensor networks," in Proc.		
1	1		Conf. Wireless Commun., Netw. Mobile Comput., pp. 1–4.		
1	19.		C. Tham, E. Keikha, and L. Ong, "A price-based adaptive task allocation for wireless sensor network,"		
1			International Conf. Mobile Adhoc Sensor Syst., pp. 888–893.		
1	20		arifi, and S. Sedighian, "A new approach to task allocation in wireless sensor actor networks," in Proc.		
1	20.		Conf. Computational Intelligence, Commun. Syst. Netw., pp. 73–78.		
1	1	international (

In Moheni, M. Sharin, and S. Scalginari, A new approach to task uncertain in whetes sensor actor networks, in Proc. 2009 International Conf. Computational Intelligence, Commun. Syst. Netw., pp. 73–78.
 F. Tirkawi and S. Fischer, "Adaptive tasks balancing in wireless sensor networks," in Proc. 2008 International Conf. Inf.

	Commun. Technol.: From Theory Appl., pp. 1–6.	
22.	X. Yu, X. Xiaosong, and W. Wenyong, "Priority-based low-power task scheduling for wireless sensor network," in Proc.	
	2009 International Symp. Autonomous Decentralized Syst., pp. 1–5.	
23.	W. Stallings, Operating Systems, 2nd edition. Prentice Hall, 1995.	
24.	Y. Zhao, Q. Wang, W. Wang, D. Jiang, and Y. Liu, "Research on the priority-based soft real-time task scheduling in	
	TinyOS," in Proc. 2009 International Conf. Inf. Technol. Comput. Sci., vol. 1, pp. 562–565.	