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|          | Paper Title:   | Developing Software Based Key logger and a Method to Protect from Unknown Key loggers  | 5        |
|          | Abstract: Key log<br>known as keylogg<br>project is to deve<br>running in stealth<br>capture the user ac<br>also save them as<br>used for legitimat<br>based Anti keylog<br>done by comparin   | ggers are hardware or software used to harvest confidential information. Keystroke logging also<br>ging or keyboard capturing, that record the keys struck on the keyboard. The main aim of this<br>elop userspace software keylogger and a method to detect and close the unknown keylogger<br>a mode. Software based keylogger is a set of computer program implanted on a machine to<br>ctivity by logging keystrokes and delivering them to a third party though their email account and<br>a file in a specified folder without knowing to the owner of the computer. Keyloggers are also<br>be purposes such as surveillance in company and parental monitoring infrastructures. Software<br>to detect and close software in which keylogger running in stealth mode. It will be<br>g the executable files of the running software.  |          |
| ι.       | Keywords: Keylo  | ogger, software, Keystroke, running, project.  | 1-3      |
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|          | Paper Title:   | Comparative Analysis of Trans-Z-Source Inverter and Cascaded Multicell Trans-Z-Source  | Inverter |
|          | Abstract: The thr<br>more output from<br>but the boost oper<br>of high-input curr  | the phase inverters produce three phase waveform always less than the input DC voltage. To get<br>the inverter. Z-source that is combination of inductor and capacitors are used in the input side,<br>ation is not so effective and also inverters with high-output voltage gain usually face the problem<br>ent flowing through their components. The problem might further be exaggerated if the inverters  |          |

|    | use high-frequenc                                     | y magnetic devices like transformers or coupled inductors. Leakage inductances of these devices  |        |
|----|---|--|--------|
|    | must strictly be s                                    | small to prevent over voltages caused by switching of their winding currents. To avoid these   |        |
|    | related problems,                                     | , cascaded trans-Z-source inverters are proposed. They use multiple magnetic cells in an   |        |
|    | alternately cascad                                    | ling pattern rather than a single magnetic cell with large turn's ratio. In this paper comparison of   |        |
|    | cascaded multicel                                     | Il Trans Z-source inverter and normal trans-z-source inverter is made for increasing the boost   |        |
| 3. | ratio. Analysis of                                    | these inverters is made using SIMULINK software and its performance has been analyzed.   |        |
|    | ~   |  | 7-11   |
|    | Keywords: Casca                                       | aded inverters transformers, Z-source inverters, Trans-z-source inverters.   |        |
|    | Defenences  |  |        |
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|    | 3.Professor &I  | HOD, 1,2,3 Department of Electronics & TeleCommunication Engineering, SSBT's College of Engineering &  |        |
|    | Technology, Ja  | Igaon, Maharashtra, INDIA. *Corresponding Author : phzope@gmail.com  |        |
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|    | Loh, Member,  | IEEE, Miao Zhu, Member, IEEE, Feng Gao, Member, IEEE, and Frede Blaabjerg, Fellow, IEEE. Cascaded multicell  |        |
|    | trans-z-source  | inverter Ding Li, Student Member, IEEE, Poh Chiang Loh, Senior Member, IEEE, Miao Zhu, Senior Member, IEEE,  |        |
|    | Feng Gao, Seni  | or Member, IEEE, and Frede Blaabjerg, Fellow IEEE.   |        |
|    | Authors:  | Daniel C. Emeniru, Okechukwu D. Onukwuli, Pere-ere Douye Wodu, Livinus A. Obasi  |        |
|    | Paper Title:  | Optimizing The Adsorption of Methylene Blue Dye onto Raw and Modified Ekowe Clay usi   | ng RSM |
|    | Abstract: This st                                     | udy explicates the optimum condition for effective and efficient uptake of cationic dye onto raw   |        |
|    | and modified (aci                                     | d activated and calcined) Ekowe clay. The clay modification spanned 750oC calcination of RS to   |        |
|    | produced RCS an                                       | d 0.5MH2SO4 activation of RS then 750oC calcination toproduce ACS. The pH, acidity, CEC,   |        |
|    | PZC, surface are                                      | ea and filtration rate opened the adsorptive characteristics of the clay samples. Factors'   |        |
|    | combinations of t                                     | the RSM-CCRD (Central composite rotatable design of Response Surface Methodology) were   |        |
|    | (MR) untake Cal                                       | cination incurred structural and morphological change onhancing percently and total surface area   |        |
|    | of the clay. The R                                    | SM showed: the correlation of MB untake and studied variables fitted quadratic model, showing  |        |
|    | untake variation v                                    | with time pH dye concentration clay amount and temperature. The analysis of variance exposed   |        |
|    | that all main facto                                   | print influenced MB uptake. The effective and material economic optimum result: 66.92%, 62.79%   |        |
|    | and 53.53% MB   | uptake for ACS, RCS and RS respectively at conditions of 47min, solution pH-3, 20mg/L dye  |        |
|    | concentration, 0.3                                    | 5gclay and 25oC showed that calcination of raw and activated Ekowe clay enhances its optimum   |        |
|    | adsorptive capacit                                    | ty for MB dye uptake.  |        |
|    | Karana dan Asti                                       | ation Official Advantice former DOM OFFICIE and 11 Statistical Applicit ANOVA  |        |
|    | <b>Keywords:</b> Activ                                | ation, Calcination, Adsorption factors, RSM, Quadratic model, Statistical Analisis, ANOVA,   |        |
|    | Optimization.   |  |        |
|    | <b>References:</b>                                    |  |        |
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Prepared by Z. Adamis, J. Fodor & R. B. Williams. ISBN 92 4 1572310 LC/NLM classification: QV 65) 31. Zangench, N., Azizian, A., Lye, L. & Popescu, R. (2002). Application of response surface methodology in numerical geotechnical analysis.55th Canadian Society for Geotechnical Conference, Hamilton, Ontario. Authors: Shashank Karne, S. M. Bapat **Paper Title:** Finite Element Analysis and Optimization of Pressure Line Filter of 250bar Abstract: This paper deals with the FEA implementation for analysis and optimization of pressure line filter for 250bar. The main aim is to reduce the cost of the products without compromising on the quality of the output. Using the optimum resources possible in designing the hydraulic products can effect this reduction in the cost of the hydraulic product. One way of doing it will be the optimizing the volume of material utilized for building the structure. An attempt has been made in this direction to reduce the volume of material. So here we consider an industrial application project consisting of mass minimization of a pressure line filter. This filter has to compensate the forces acting on the body and has to fulfill certain critical constraints. ANSYS has been used for this analysis which uses finite element method for solution. The methodology followed in this work is comparison of stresses induced in the filter body used for construction of body of the pressure line filter. These stresses are compared to yield stress and considering minimum factor of safety in range of 2 to 3. 24-29 Keywords: ANSYS, FEA, optimization, design, filter. **References:** Finite Element Analysis of Pressure Vessels David Heckman, University of California, Davis Mentor: Gene Massion, Mark Greise 1. Summer 1998 John Wiley & Sons, Inc., New Jersey. ISBN 0-471-24410-4. 2. 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| Authors:          | Emsaieb Geepalla, Nassir Abuhamoud   |              |
|-------------------|--|--------------|
| Dopor Titlo       | Using Spatio-Temporal Role Based Access Control for Physical Access Control Spe                                    | ecification: |
| Taper The.        | Towards Effective Cyber-Physical Systems   |              |
| Abstract: Spatio  | -Temporal Role-based access control (STRBAC) has been acknowledged as an effective                                 |              |
| mechanism for sp  | ecifying access control policies for cyber systems. However, it is not yet clear how a STR-BAC                     |              |
| model can be used | model can be used for specifying access control policies for physical systems. In this paper, we propose a Spatio- |              |
| Temporal Role B   | Temporal Role Based Access Control (STRBAC) system for modeling the physical access control specification.         |              |
| However, any cor  | nprehensive access control model such as STRBAC requires verification mechanisms to ensure                         |              |
| the consistency o | he consistency of access control specification. As a result, this paper makes the use of Alloy to perform the      |              |
| analysis of the S | nalysis of the STRBAC specification. To achieve this, the paper make the use of AC2Alloy to automate the           |              |
| transformation be | tween STRBAC specification and Alloy. With the help of an example, this paper shows how the                        |              |
| STRBAC model      | is transformed into Alloy using our AC2Alloy, and then the produced Alloy model will be                            |              |
| analyzed using Al | loy Analyzer to detect inconsistencies in the STRBAC specification.  |              |

Keywords: Spatio-temporal role based access control, alloy, ac2alloy, physical system.

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| Authors:         M. Anbarasu, R. Padmavijayan           Numerical Investigation on the Interaction of Local and Global Buckling in Cold Formed Steel<br>Lipped Channel Columns           Abstract:         This paper reports a numerical investigation concerning the post-buckling behaviour of cold-formed<br>steel lipped channel columns under axial compression affected by the interaction of local and global buckling<br>against the experimental data available in literature on cold-formed steel lipped channel columns. Genemetric and<br>material non-lineuritics are included in the finite clement model. Is developed and verified<br>against the experimental data available in literature on cold-formed steel lipped channel columns. Genemetric and<br>material non-lineuritics are included in the finite clement model. Static buckling analysis is carried out and<br>buckling modes such as local and distortional are extracted to incorporate the initial imperfections. After the<br>verification of the finite element model extensive parametric study have been carried out by varying the length and<br>thickness. The finite Element Software ABAQUS is used for the study. The columns strengths predicted by the<br>finite element analysis are compared with the design column strengths predicted by DSM - AS100:2007, ASNZ:<br>4000-2005. Based on this study the influence of local/global interaction on ultimate strength are discussed and<br>presented.           Keywords:         Columns, Buckling, Local/Global Interaction, Axial compression member etc.           References:<br>1.         Hancok GJ. Bastorianal backling formulas for channel column, Jonanal of Structural Engineering, 114(2) (1998) 2770-2783.         38-42           S. Young, B, and Rasmusen, K. J. R. Design of lipped channel columns. Journal of Structural Engineering,<br>172 (1992) 1786-1803.         38-42     <   |    | University, 200<br>11. SamratMondal,<br>Proceedings of   | 2.<br>ShamikSural,andVijayalakshmiAtluri.TowardsFormal Security Analysis of GTRBAC using Timed Automata. In<br>the 14th ACM Symposium on Access control Models and Technologies, pages 3342, Stresa, Italy, June 2009.   |            |
| References:         Numerical Investigation on the Interaction of Local and Global Buckling in Cold Formed Steel lipped Channel Columns           Abstract: This paper reports a numerical investigation concerning the post-buckling behaviour of cold-formed steel lipped channel columns under axial compression affected by the interaction of local and global buckling. Three types of lipped channel columns concerning the post-buckling analysis is carried out and buckling modes such as local and distortional are extracted to incorporate the initial imperfections. After the verification of the finite element model. Static buckling analysis is carried out and buckling modes such as local and distortional are extracted to incorporate the initial imperfections. After the verification of the finite element model extensive parametric study have been carried out by varying the length and thickness. The finite Element Software ABAQUS is used for the study. The column strengths predicted by the finite element analysis are compared with the design column strengths predicted by DSM - AS100:2007, AS/NZ: 4000-2005. Based on this study the influence of local/global interaction on ultimate strength are discussed and presented.           Keywords: Columns, Buckling, Local/Global Interaction, Axial compression member etc.           References:           1         taxSW, Hancek GJ. Disortional buckling formale for hamel columns, Journal of Structural Engineering, ASCE, 117           3         Law CW, Hancek GJ. Disortional buckling formale columns. Journal of Structural Engineering, ASCE, 117           1         Yamag, Hancek GJ. Disortional buckling formale columns, Journal of Structural Engineering, ASCE, 117           3         Yamag, Tand Rasmusen, K. J. R. Design of lipped channel colu   |    | Authors:   | M. Anbarasu, R. Padmavijavan   |            |
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| Verification of the finite element forder exclusive parametric study nave over formation of the study with the finite element analysis are compared with the design column strengths predicted by DSM - AS100:2007, AS/NZ: 4600-2005. Based on this study the influence of local/global interaction on ultimate strengths are discussed and presented. <b>References:</b> 1.       Hancock GJ. Distortional buckling of steel storage rack columns, J Struct Engng, 111(12) (1985) 2770-2783.         2.       Lan SCW. Hancock GJ. Inclustic backling of channel column, Journal of structural Engineering, 115(5)(1987) 1063-78.         3.       Lan SCW. Hancock GJ. Inclustic backling of channel columns, Journal of structural Engineering, 82CE, 117 (1992) 1786-1803.         7.       Kwon YB, Hancock GJ. Tests of cold formed channel vith local and disortional buckling, Journal of Structural Engineering, 82CE, 117 (1992) 1786-1803.         7.       Kwon YB, Hancock GJ. Compression Tests of Cold-Formed Steel Channels with Complex Stiffeners, Journal of Structural Engineering, 172 (2002) 728-736.         7.       Jintang Yan, Channel Columns Undergoing Local, Distortional, and Overall Buckling, Journal of Structural Engineering, 173 (2002) 727-745.         8.       Ben Young, Hancock GJ. Compression Tests of Cold-Formed Steel Channels with Complex Stiffeners, Journal of Structural Engineering, 1403 (2003) 1403-1411.         9.       Narayanan S, Mahendran Mahen. Ultimate Capacity of Innovative Cold-formed Steel Columns, Journal of Structural Engineering, 1502(2003) 737-045.         10.       Ben Young, Ebab Elibobody, Buckling Analysis of Cold-Formed St  |    | buckling modes s   | function as local and distortional are extracted to incorporate the initial imperiections. After the   |            |
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| Paper Title:         Automated Kiosk for Vending Tickets and Refreshments at Multiplexes   |    | Autnors:   | babila Doda, Priya Dingria, Konini Temkar  |            |
|  |    | Paper Title:   | Automated Klosk for Vending Tickets and Refreshments at Multiplexes  |            |

| 8.  | Abstract: In this<br>system and serpen<br>as a Ticket Vend<br>transaction consis<br>which include sna<br>The ticket/tickets<br>In order to reduce<br>which provides ea<br>worry while using<br>language of their of<br><b>Keywords:</b> Ticket<br><b>References:</b><br>1. "Today and Ton<br>2. "Design and Im<br>Cadence" V.V.S.<br>Xilinx ISE and<br>3. The wikipedia v<br>4. The IEEE webs   | research paper the proposed concept is to replace the manual work in traditional Ticket issuing<br>the queues at food counters into an Automated Vending Machine. A ticket machine, also known<br>ing Machine (TVM), is a vending machine that produces tickets for multiplexes. The typical<br>ts of a user using the display interface to select the type and quantity of tickets and refreshments<br>tacks and beverages, and then choosing a payment method which can be cash, credit/debit card.<br>are printed and dispensed to the user and refreshments will be dispensed at the outlet conveyor.<br>serpentine queues and mesh at ticket counters, automated Ticket Vending Machine can be used<br>ase and convenience for the customers. Customers with lack of technical knowledge need not<br>g vending machines because the GUI is user friendly and more over the customer can choose<br>choice for ease.<br>t Vending Machine, outlet conveyor, Automated Kiosk, ecard.<br>norrow of Vending Machine and its Services in Japan''Toshio Yokouchi DIRECTFORCE Association, Japan<br>plementation of an automatic Beverages Vending Machine and its performance evaluation using Xilinx ISE and<br>S.Vijay krishna, A. Monisha, Sk.Sadulla, J. Prathiba #School of electronics, Vignan Universityormance evaluation using<br>Cadence<br>website. [Online]. Available:- <u>http://en.wikipedia.org/wiki/Interactive_kiosk</u><br>ite. [Online]. Available:- <u>http://www.ieee.org/</u>   | 43-45 |
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|     | Authors:  | Yasen S. Kalinin, Edy K. Velikov, Valentina I. Markova   |       |
|     | Paper Title:  | Design of Indoor Environment Monitoring System Using Arduino   |       |
| 9.  | <ul> <li>monitoring of par<br/>with different fund</li> <li>Keywords: Ardui</li> <li>References: <ol> <li>OSHA, Indoor a</li> <li>O.Fernandes, Ecoordination ac</li> <li>W.J Fisk and Ap. 158-172.</li> <li>H Chappells, E S<br/>Building Resear</li> <li>OCG Adan, Ng<br/>Indoor Environn</li> <li>Fisk, W.J., D. E</li> <li>M. A Pillai, S. V.<br/>Intern. Conf. IC</li> <li>S. Bhattacharya<br/>on Sensing Tecl</li> <li>L. Xiaoqin, H<br/>SensorNetwork</li> <li>T. Trifonova, V<br/>environment", I</li> </ol> </li> </ul> | <ul> <li>ameters in the workplace, required for optimal performance. Several sensors and three modules, ctionalities, are used to complete the system.</li> <li>ano, air quality, indoor monitoring.</li> <li>air quality in Commercial and Institutional Buildings, OSHA 3430-04, U.S. Department of Labor,2011.</li> <li>a.d., et al., "En VIE coordination action on indoor air quality and health effect", final activity report, European tion for IAQ and Health Effects' (2004-2008), 2009.</li> <li>H. Rosenfeld, "Estimates of improved productivity and health from better indoor environments". Indoor Air, 1997. 7(3):</li> <li>Shove," Debating the future of comfort: environmental sustainability, energy consumption and the indoor environment", rch &amp; Information, Taylor &amp; Francis, 2005.</li> <li>A-Tham J, Hanke W, Sigsgaard T, van den Hazel P, Wu F., "In Search of a Common European Approach to a Healthy ment", Environmental Health Perspectives. 2007; 115(6):983-988. doi:10.1289/ehp.8991.</li> <li>Jack, and G. Brunner, "Benefits and costs of improved IEQ in offices". Indoor Air, 2011. 21(5): p. 357-367.</li> <li>Veerasingam, Yaswanth Sai D," CAN Based Smart Sensor Network for Indoor Air Quality Monitoring", Proc. In IEEE CSIT, 2010, vol.3, pp. 456-460.</li> <li>a, S. Sridevi, R. Pitchiah, "Indoor air quality monitoring using wireless sensor network", Sixth International Conference hnology (ICST), 2012, pp. 422 - 427.</li> <li>Jai Jianbin, Z. Xiaoli, W. Hairan, "Design and Implementation of Indoor Environmental Monitoring Wireless s Based on JN5139", 3rd Int.Conf. on Advanced Computer Theory and Engineering(ICACTE), 2010, vol.2, pp.615-618.</li> <li>Markova, V. Dragaanov, K. Angelova, V. Dimitrov, "Smart sensor network for regonomic evaluation of working Proc. XLVIII Int.conf. ICEST2013, Ohrid, Macedonia, vol.1, pp.371-374 June, 2013.</li> </ul> | 46-49 |
|     | Authors:  | Vivek Kumar Malik, Amit Kumar Garg   |       |
|     | Paper Title:  | Simulation Analysis of Four Wave Mixing Effect in WDM Optical System   |       |
| 10. | Austract: The he<br>the mselves when a<br>the dominating d<br>spacing and low a<br>different frequence<br>important deleteri<br>multiplexing when<br>powers. The pape<br>spectrums, eye dia<br><b>Keywords:</b> Channe<br><b>References:</b><br>1. G.P Agarwal, "<br>2. M.Wu and W. I<br>Jun. 2004.<br>3. G.P. Agarwal "  | optical power is very high, they become important in WDM. Four-wave mixing (FWM) is one of<br>legradation effects in wavelength divisionmultiplexing (WDM) systems with dense channel<br>chromatic dispersion on the fiber. Four wave mixing (FWM) is a parametric process in which<br>cies interact and by frequency mixing generate new spectral components. FWM can have<br>ous effects in optical fiber communications, particularly in the context of wavelength division<br>re it can cause cross-talk between different wavelength channels, and /or an imbalance of channel<br>r presents the design and performance analysis of four-wave mixing effect on the basis of output<br>agrams, BER, eye opening and Q-factor for different values of channel spacing.<br>mel spacing, Eye diagram, FWM, nonlinear effects, WDM.  | 50-53 |
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