



K.K. Wagh Education Society's K.K. Wagh Institute of Engineering Education and Research, Nashik.

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TECHNICAL NEWS LETTER

■ One day seminar on TQM in Engg. Education organized by Engineering Education Foundation - Nashik Consortium



The workshop was inaugurated by Dr. M. S. Gosavi, Secretary, Gokhale Education Society, Nashik. He said that 'Quality' and 'Excellence' are the two buzzwords in today's era. Total Quality in Higher Education can be achieved through Curriculum Development, Faculty Training, Establishing Quality Cell, Competency Development and Innovative Minds. Trust is the base of quality and if quality culture is developed teachers can perform their duties with relax mind set and students can excel in their studies. Mr. Deepak Shikarpur, Director Autoline Design Software, Pune highlighted the expectations of industries from engineering students. He suggested the use of e-learning in effective way and explore the possibility of using services of alumni, retired staff and educated spouses of employees for the benefit of the Institute. Prof. Dr. G. K. Kharate, Dean Faculty of Engineering, University of Pune informed about the steps taken at University level for curriculum development and examination reforms. Prof. N. V. Ratnalikar expressed his thoughts through You Tube presentation. Prof. Dr. K. N. Nandurkar, Principal, K. K. Wagh Institute of Engineering Education & Research, Nashik showed the application of TQM tools in engineering education through various examples. Dr. S. A. Halkude, Principal, WIT Solapur highlighted the expectations of stakeholders from the technical education system. He said that students should question the learning process. The teachers should work in team and take up research and consultancy assignments. Special efforts should be done for faculty qualification enhancement, increasing research publications and getting patents. He suggested that Alumni members should be invited as speakers, guest,

examiners, guide or member of advisory board for the department. Over 60 staff members from various engineering colleges in Nashik Region participated in this programme.

■ Expert lecture on 'Elective Selection'



Department of Computer Engineering had organized Lecture on 'Elective selection' for TE Computer Engineering Students on 10th April 2012. Dr. S. S. Sane, Prof. N. M. Shahane, Prof. M. B. Jhade, Prof. S. M. Kamalapur, Prof. S. S. Banait, Prof. Rupali Bora guided TE Computer Students on various Elective subjects of Final Year.

■ Expert Lecture Indowordnet and Multilingual Resource Conscious Word Sense Disambiguation



Department of Computer Engineering had organized Expert talk on 'Indowordnet and Multilingual Resource Conscious Word S e n s e Disambiguation' by Dr. Puspak Bhattacharya Professor, IIT Bombay on 28th April 2012. This was the first event of CSI KKWIEER student branch for the year 2012. Shri. Avinash Shirode Newly elected CSI Nashik Chapter Chairman, Patron and Dr. Kelkar Fellow member CSI, graced the function. Dr. S. S. Sane, Head of Computer Engineering felicitated the guest.

■ Two Days Workshop on IT Project Management and its Application



The Dept. of Information Technology had organized a two days State Level Workshop on "IT Project Management and its Application" on 30th March and 1st April,



2012 which was sponsored by University of Pune, under Quality Improvement Programme. The resource persons for the workshop were Prof. Dr. Shashikat A. Kelkar, Adjunct Professor, Dept. of Computer Science and Engineering, I.I.T. Bombay and Dr. Uday P. Wad, Director, Seed Infotech, Nashik. On the first day of workshop, Dr. Uday Wad discussed various topics such as Introduction to Project Management, Project Planning and Execution, Organizing a Project Team, Project Monitoring and Control. On the Second day Prof. Dr. S. A. Kelkar discussed Function Point Analysis, Project Review, PERT/CPM, Configuration Management. He concluded the session with one Case study of Hospital Information System. 130 Students and Staff member from various colleges were enrolled for the workshop.

Poster/Model presentation competition organized by department of Applied Science



A Poster Presentation Competition was organized for all the First Year Engineering students during 26th March 2012 - 7th April 2012 under the subject Communication Skill. Students were encouraged to present their innovative ideas and knowledge through the posters. Hon. President Shri. Balasheb Wagh, and trustees of K. K. Wagh Education Society, Hon. Principal, Dr. K. N. Nandurkar, HODs and staff members of various departments visited the event and appreciated the efforts taken by student. Communication Skill teachers of various departments guided students for the posters. Senior Staff members of the respective department worked as judges. The event was organized by Science & Maths Department. Prof. S.N. Kadlag (H.O.D., Science & Maths) had given the guidance for organizing the event. The coordination of the event was done by Prof. G. B. Dabhade. The topics assigned for poster/model presentation were as follows:

Division	Name of Branch	Topic	Date
A	Production Engg.	Micromachining	27/03/2012
B	Mechanical Engg.	Recent Innovation in Mechanical Engineering	02/04/2012
C	Computer Engg.	Cloud Computing	29/03/2012
D		Android	29/03/2012
E	Electronics & Telecomm.	Nanotechnology implementation	30/03/2012
F	Mechanical Engg.	Recent Innovation In Mechanical Engineering	04/04/2012
G	Electrical Engg.	Electrical application	29/03/2012
H	Civil Engg.	Green building and use of Non conventional Building material	31/03/2012
I	Information Tech.	Information security	07/04/2012
J	Chemical Engg.	Green Energy	04/04/2012
K	Electronics Engg.	VLSI & RFID Applications	03/04/2012
L	Mechanical Engg.	Version automobiles	28/03/2012
M	Electrical Engg.	E-Waste	30/03/2012

NBA Results Declared

The NBA expert committee under the Chairmanship of Prof. Pradeep Kumar (IIT Roorkee) visited the Institute during August 26-28, 2011 and January 27-29, 2012. The results were declared recently as follows:

Sr. No.	Name of Programme	Accreditation Status	Duration w.e.f. 15/03/2012
1	Production Engg.	Accredited	03 Years
2	Civil Engineering	Accredited	
3	Mechanical Engg.	Accredited	
4	Electrical Engg.	Accredited	
5	Chemical Engg.	Accredited	

Seminars / Workshop / Training Attended By Staff:

- Prof. D. M. Chandwadkar, Prof. Mrs. V. R. Lele, Prof. Mrs. R.V. Chothe, Prof. V. R. Takate, Prof. Ms. S. C. Shinde, Prof. Ms. S. V. Shelke, Prof. Kiran Navle staff member of Department of Electronics and Telecommunication Engineering has attended 'ePGCON' organized by Cummins college of engineering on 23rd April 2012.
- Following staff members has attended one days workshop on 'Total Quality Management in Education' jointly organized by K. K. Wagh Institute of Engineering Education & Research, Nashik & Matoshri Institute of Technology, Nashik on 21st April 2012.

Sr. No.	Name of Staff	Department
1	Prof. Sukhdeo S. Naik	Science
2	Mrs. Vaishali R. Lele	Electronics & Telecommunication
3	Mrs. Tanuja N. Date	Electrical Engineering

- Prof. S. K. Badjate, Prof. K. N. Somvanshi, Prof. Smita G. Pachpande, Prof D. V. Medhane, Mrs. Shraddha S. Shinde and Mrs. Shital Kolhe staff member of department of Information Technology attended a State Level workshop on 'IT Project Management and its Application' on 30th March-1st April, 2012

Student's Achievements

- Students of Department of Computer Engg. :-
 - o Ms. Deepali Mahalpure, Ms. Priyadarshani Shende, Ms. Anita Mahajan and Ms. Samita Khatale secured 3rd Prize in the State Level Project Competition 'PROFEST 2K12' held at SRES College of Engg., Kopargaon on 4th April 2012.
 - o Ms. Ankita Nreurkar, Ms. Saumya Medapati, Ms. Sayali Mulay, Ms. Prerna Mundada, Ms. Niyali Magare, Mr. Yash Kohad, Ms. Prajakta Markand, Mr. Akshay Rahane won 1st Prize in Poster Competition organized by K.K.W.I.E.E.R, Nashik during 26th March 2012-7th April 2012.
- Mr. Anirudha Kesankurthy, Ms. Kshitija Joshi, Ms. Vaishnavi Mohole, Ms. Aditi Jain student of first year Electronics engineering secured 2nd Prize in Poster Competition organized by K. K. Wagh Institute of Engineering Education & Research, Nashik during 26th March 2012-7th April 2012.

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Industrial Visits Organized by Department For Students:

Date	Class	Name of Company
01/04/2012-03/04/2012	B. E. E&TC	SaiRush Electronics, Thane
01/04/2012	B. E. Electrical	Enercon Ltd., Pachpatta Ghoiti
01/04/2012	S. E. Electrical	NTPC, Eklahare, Pachapatta, Ghoiti
11/04/2012	B. E. Electrical	Sangamner sugar factory, Sangamner
12/04/2012	B. E. Electrical	L & T. Ahmednagar
10/04/2012-13/04/2012	S. E. Mechanical	MSRTC workshop, Peth Road, Nashik
11/04/2012-13/04/2012	T. E. Mechanical	Narang Cold Storage, Ambad, Nashik
13/04/2012	S. E. Electrical	Link Servo Ltd. & Faredeal Transformers Ltd. Ambad, Nashik
17/04/2012	T. E. Civil	Water Treatment Plant Near Boys Town, Nashik

Training & Placement :

Name of the Department	Name of Company	No. of students selected
Computer Engg.	Larsen & Turbo Infotech	03
Computer Engineering	Amdocs India Pvt Ltd.	03
Production Engineering	Raymonds, Sinnar	01
Mechanical Engineering	Raymonds, Sinnar	02
Electrical Engineering	Scope T & M Pvt.	03
Information Technology	Amdocs India Pvt Ltd.	01
Management Studies	Kanchan Infrastructures	01

Other Events

- Prof. Dr. K. N. Nandurkar, Principal was felicitated along with all other Principals of Engineering Colleges in Nashik Region by The Institute of Engineers (India) Nashik Local Center on 20th April 2012. Mr. H. R. Pawar, Chief Engineer, Public Work Region, Nashik was chief guest and Prof. D. D. Barve was Guest of Honor
- Prof. A. L. Varne staff member of Department of Civil Engineering conducted Environmental Engineering Practicals of G. N. Sapkal college of Engineering, Nashik on 4th April 2012.
- Prof. Dr. B. E. Kushare, Head of Department of Electrical Engineering offered Electrical consultancy services to Times of India, New Delhi. BOSCH, EPCOS, CEAT Ltd. during month of April 2012.

Abstracts Of Papers Presented By Staff :

A survey of Deadlock Detection in Distributed Database.

Prof. Mrs. I. Priyadarshini, Prof. Dr. S. S. Sane
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- In distributed database, data reside in several locations. Deadlock occurs in database system that permits concurrent execution of transaction using locking protocol. There are many algorithms for detecting deadlock in distributed database but most of them require messages to be communicated between sites or to collect local wait for graph at all site to a single site to detect global deadlock. All local wait for graphs are not collected at same time so there is a possibility of detecting false cycle. In this paper, a new technique for detecting deadlock as discussed in section II which uses linear transaction structure (LTS) to detect local deadlock and Distributed Transaction Structure (DTS) to detect global deadlock will be presented. All those algorithms focus on detection of deadlock where the database is not replicated. As data replication improves performance of database system. The behaviour of those algorithms in replicated environment is to be analysed.

Keywords: Deadlock, Distributed Transaction Structure, Local Transaction Structure, Replicated database.

Incremental Join Aggregate Algorithms Based On Compound Sliding Window.

Prof. D. M. Kanade, Prof. Dr. S. S. Sane
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- Incremental join aggregate queries based on sliding window are a sort of queries that are widely used. All the join aggregate query algorithms in existing research works are designed for immediate continuous queries. A join aggregate query method based on Compound sliding window for periodically executed continuous queries is presented. This method organizes the basic windows in a compound sliding window according to their join properties, the aggregate values are computed while the join processing, the join results of compound sliding window are not saved, so the memory used by query processing is greatly reduced. Some of which we discussed in CJMAX where the input data stream is serial. CJMAX algorithm possesses superior performance. There will be good time and space complexity of this incremental algorithm. Many applications in several domains require online processing of continuous data flows. They produce very high loads that require aggregating the processing Capacity of many nodes. Current Stream Processing Engines do not scale with the input load due to single-node bottlenecks. Here new concept Cloud Stream, a scalable and elastic stream processing engine for processing large data stream volumes. Cloud Stream uses a novel parallelization technique that splits queries into sub queries that are allocated to independent sets of nodes in a way that minimizes the distribution overhead. Its elastic protocols exhibit low intrusiveness, enabling effective adjustment of resources to the incoming load. Elasticity is combined with dynamic load balancing to minimize the computational Resources used.

Web data Extraction from Template pages.

Prof. Ms. Sayali Badhan, Prof. M. B. Jhade
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- Web data extraction from web pages is important for relative analysis of the web data. Two main types of web data extraction are record level web data extraction and page level web data extraction. The existing systems extract the data at record level and they take a single web page as an input or they extract the web data at page level assuming that the web pages are encoded with a fixed template and they take 2-3 web pages as an input. In this paper, web data extraction from template pages, an attempt is made to extract the data from web pages encoded using variant templates by formulating the data extraction problem as a decoding process of page generation based on structured data and tree templates. Also, the performance of the system will be measured to see whether it performs efficiently when more than 2-3 web pages are given as an input.

Keywords: page level web data extraction, record level web data extraction, structured data, tree templates, web data extraction.

Customisation of Data Sets for Knowledge Based System.

Prof. Ms. Vidya Bodhe, Prof. M. B. Jhade
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

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Abstract:- Data mining detects various types of patterns in large volumes of data. Most data mining algorithm takes as input data set with a horizontal layout. Significant effort is required to prepare summary data set in a relational database with normalized tables. For preparing data sets suitable for data mining analysis, we have to write complex SQL queries, perform operation of joining tables and column aggregation. For SQL code two main ingredients are joins and aggregations. Standard aggregation returns one column per aggregated group and produce table with a vertical layout and Standard aggregations are hard to interpret when grouping attributes have high cardinalities. All these are limitations of standard aggregation. Because of these limitations, standard aggregation is not much suitable for Preparation of data set for data mining analysis. Horizontal aggregation is a simple method which generates SQL code to return aggregated columns in a horizontal tabular layout and returns set of numbers instead of one number per row. This paper is useful for building a suitable dataset for data mining analysis using horizontal aggregations in SQL. Three fundamental methods are used to evaluate horizontal aggregations: CASE, SPJ, and PIVOT.

■ **Webpage Clustering Using Multiview Learning.**

Prof. Lalit A. Patil, Prof. Mrs. S. M. Kamalapur
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- We are facing an ever increasing volume of text documents. The abundant texts flowing over the Internet, huge collections of documents in digital libraries and repositories, and digitized personal information such as blog articles and emails are piling up quickly every day. These have brought challenges for the effective and efficient organization of text documents. Clustering in general is an important and useful technique that automatically organizes a collection with a substantial number of data objects into a much smaller number of coherent groups. Traditional Webpage clustering typically uses only the page content in an appropriate feature vector representation such as Bags of words, term-frequency /inverse document frequency and then applies standard clustering algorithms. Typically, Webpage clustering algorithms only use feature extracted from the page text. However, social -bookmarking websites, such as Stumble Upon [11] and Delicious has led to a huge amount of user-generated content such as the information that is associated with the Webpage. To our knowledge, all the existing approaches exploiting tag information for webpage clustering assume that all the Webpage are tagged, which is a somewhat restrictive assumption. In a more realistic setting, one can only expect that the tags will be available for only a small number of Webpage. In this paper, we propose a new web page grouping approach based on Probabilistic Latent Semantic Analysis (PLSA) model. An iterative algorithm based on maximum likelihood principle is employed to overcome the aforementioned computational shortcoming.

■ **Embedded Visual Cryptography Scheme for Colour Images.**

Prof. Ms. Shital Pawar, Prof. Manoj Jhade
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- Visual Cryptography is an image encryption technique used to hide the secure information in images. It allows the encryption of secret image into n number of

shares and distributed into n number of participants. For example in (k, n) secret sharing problem the secret image can be visually recover by stacking together any k or more transparencies of the shares. But cannot reveal any secret information by stacking less than k transparencies together. The Embedded EVCS is constructed by adding random shares of secret image into meaningful covering images. This paper proposes a method of encoding a color image into n meaningful C, M, and Y halftone shares using the scheme of halftone visual cryptography. And apply 64-bit key to the colour halftone image for more secure secret image.

■ **Performance Evaluation In Distributed System Using Dynamic Load Balancing.**

Prof. Ms. Rutuja Jadhav, Prof. Mrs. Snehal Kamalapur
(Department of Computer Engineering) paper presented at 'PGCON' National Conference organized by SIT, Pune during 21st-22nd April 2012.

Abstract:- Distributed computing system (DCS) is the collection of heterogeneous and geographically dispersed computing nodes. Nodes co-operatively work to complete the task in the DCS. But because of the dynamic nature of DCS, nodes may fail randomly thus performance is an important factor to be considered. In order to achieve improved performance resource management plays an important role. In this paper dynamic load balancing is focused to achieve better performance results even in case of node failure using regenerative theory.

Keywords: Distributed Computing System, Reliability, Load balancing

■ **Optimizing & Analysing Overall Equipment Effectiveness (OEE) Through Design of Experiments (DOE).**

Prof. A. S. Relkar & Dr. K. N. Nandurkar
(Department of Production Engineering) paper presented at International Conference on Optimization and Computing (ICMOC-2012) during 10-11 April, 2012 at Noorul Islam University, Nagercoil.

Abstract:- Continuous availability of reliable sophisticated equipment with precision is need of the competitive market. Overall equipment effectiveness (OEE) is important performance measure metric for equipment effectiveness. An attempt has been done to measure and analyze existing overall equipment effectiveness of critical machinery producing important automobile components like serration cap, Dowel rod and sequence rod. Which are used by leading automobile company. By measuring the performance of existing system, reference values are obtained for design of experiments. By using MiniTab15 software an experimentation has been done on three factors and two level of OEE. Main effect plots and regression analysis provides information about which is most influencing factor and classic relationship between availability, performance rate and quality rate. Significance of each factor is indicated by P-value in the given analysis. Finally counter plots and response surface method results in to optimized values of three factors of OEE. Simulated values of the output will be useful information to industry.

Keywords: Overall equipment effectiveness (OEE), Design of Experiments (DOE), Minitab15, Regression analysis, Response surface optimization.

Prof. Dr. K. N. Nandurkar
PRINCIPAL

