

■ IET - Karmaveer Expo 2015



Inauguration of IET- Karmaveer Expo 2015

Department of Electrical Engineering has organized IET- Karmaveer Expo 2015 a National Level working model contest during March 13-14, 2015 for the students of engineering & technology. During the Expo the poster & slogan competition, Photography Competition was also organized for the students. The department is organizing the event since 2003. The projects presented by the students are placed in two groups based on the application of the projects. The total students participated were 313 from various institutes throughout the country. The total prize amount was Rs. 2, 50,000. The event was inaugurated by Hon. Dr. Shrikant Karwa, Director of Catapharma Chemicals Pvt., Ltd., Sinner on March 13, 2015 in the presence of Hon. Shri. Balasaheb Wagh, President, K. K. Wagh Education Society, Hon. Shri. Kashinathdada Tarle, Vice-President, Principal Dr. K. N Nandurkar and Head of Electrical Engineering Prof. Dr. B. E. Kushare. Panel of Judges included Dr. O. G. Kulkarni, Mr. John Yesuraj, Mr. Dhiraj M. Methikar, Mrs. Apurva Jakhadi, Mr. Avinash Shirole, Mr. Chandrakant Mohikar, Mr. Ajay Kahane, Dr. Nagarkar, Mr. Prasad Pawar and Mr. Bichawe. For valedictory function chief guest was Hon. Shri. Gaurav Gupta, M.D., KOSO India. In Group - I, First Prize of Rs. 65,000/- won by Arghya Biswas, Abhishek Pal, Nikesh Hegde from SIES GST Institute,

Second Prize of Rs. 40,000/- won by Adarsh Shinde, Pranav Sarnobat, Rohan Jadhav, Praveen Rai and Harsh Sharma from B. R. Harne College of Engineering & Technology and Third Prize of Rs. 20,000/- Shaik Azhar ahmed, Y. Mounika and K. Dhanasri from GRIET, Hyderabad. In Group-II First Prize of Rs. 65,000/- won by Kushare Laxman Sukdev, Sagar Prakash Derle, Shrikrushna Hemraj Khachane and Harshad Sopan Kanadi from K.K.W.I.E.E.R, Nashik, Second Prize of Rs. 40,000/- won by Mrinal Sharma, Rohit Mulchandani, Ajinkya Jagtap and Amey Kakulate from Shatabdi College of Engineering, Nashik and Third Prize of Rs. 20,000/- won by Gaurav Bhavsar and Rahul Girase from Sandip Foundation College of Engineering, Nashik.

■ Equinox 2015



Prof. Dr.S.S. Sane felicitating to Chief Guest Mr. Goyal at Inauguration of Equinox 2015

Equinox 2015, a national level technical symposium has been organized by computer engineering department on 12 and 13 March 2015. Students from various districts has participated in various Technical & non-technical events such as C & C++ Programming, Web Designing, Project Competitions, Paper Presentation, Quiz competition, Marketing, treasure hunt, Workshops/Seminars, Virtual Campus and made it a grand successful event. Prof. Wasudev Pingle coordinated the event. Hon. Shri. Kashinathdada Tarle, Vice President of K. K. Wagh Education Society graced the Inauguration function.

F.O.R.C.E. 15



Participants of F.O.R.C.E. 15

Department of Civil Engineering of our Institute had organized a National level symposium "F.O.R.C.E. 15" on 13 & 14 March 2015. It comprises of technical and non technical events which provided the platform for Civil Engineering students to improve their technical & managerial skills-along with along with their role in social activities. This year F.O.R.C.E played important role in making the society aware about the cleanliness through its theme "Clean India Green India" which included theme based Drama at college. In this symposium various technical events such as Surveying-E-Everest, Cad-Enza, Bridge-O-Mania, Quiz & non technical events like Poster competition, Snap Hunt & Drama were organized. The various events had a huge response of around 1500 participants from the various colleges throughout the country.

Eclat Invasion'15



Organising team of Invasion'15

For the fifth consecutive year Eclat Invasion'15 was organized by Department of Production Engineering during March 12-14, 2015 at K. K. Wagh Institute of Engineering Education and Research, Nashik. This event was inaugurated by Mr. Sanket Salvi, Alumnus of Production Department and Prof. S. B. Chandgude, Head, Dept. of Production Engineering. All the faculty

members of the department and students were present in large number during the inauguration function. Approximately 370 students participated in different events like: Robo-Race, Brain Squeezer, Design competition using Auto-Cad and Pro-E, Save the Eggstronaut, Somas Cube & Poster presentation, Tyrolene Traverse, Angry Buddies etc. Prizes were given to winners and runner ups along with consolation prizes to the students for different events.

Telekinesis 2K15



Inauguration of Telekinesis 2K15.

Electronics and Telecommunication department was filled with excitement and buzz after the start of this year's National Level Megafest-'Telekinesis2K15' on a very high note with the official launch of website www.telekinesis2k15.com on 4th March 2015. Mr. Sagar Nikam and Mrs. Madhura Shelar of Excellent Learning Centre graced the website launch event as the chief guest and congratulated the department for a successful start as 'a good start is half the battle won'. The event was organized on 13th and 14th March 2015. It started with the inauguration ceremony with Chief Guest by Mr. Devendra Bhangale (EPCOS Company) and Mr. Paul K. Benhar (SIEMENS Company). Both the chief guests enlightened the audience with their experiences and motivated students to organize many such events. The first day events comprised of Dazzle-d-proyecto (Project Competition), C/VHDL Crackers (C / VHDL Programming), Recruitment Spark (Aptitude, GD, Extempore), Lumos Ars N Phos Techne (Poster, Video Clipping & Event Photography Competition), Photon Battles (LAN War). Along with gaming, poster and event photography competition, on 14th March 2015, events like Lumotract (Paper Presentation), Luminaire De Circuito (Engineer's Perception), Illuminati (GK Quiz Competition) were organized. Almost 1000 participants were there for event on 13 and 14th March 2015.

continued on page 3

■ Mecheaven 2015



Inauguration of Mecheaven 2015

Mecheaven 2015 is a National Level Technical Symposium conducted by the department of Mechanical Engineering. It is a Traditional Student Program of the institute held successfully over the last 11 years. Consequently, Mecheaven 2015 is up the prospect with a new theme of MAKE IN INDIA. The event was scheduled on 12th & 14th March 2015. Mr. Jitendra Kakuste (Deputy Collector, Nashik) was Chief Guest of Inauguration Ceremony held on 12 March 2015 & Mr. Ravi Verma (NIMA President, Nashik) as Chief Guest of Prize Distribution Ceremony held on 14th March 2015. Hon. President of K. K. Wagh Education Society Shri. Balasaheb Wagh and Principal Dr. K. N. Nandurkar were present for inauguration. Various Events to develop student's technical prospect such as Clash of Canons, Lazer Maze, Lathe War, Treasure Hunt, Robo Race, Robo Soccer, Contraption, Gixxer Mania, Mech Post, Designer Era, ELC Champ, Click it, Cybersport Arena & Pixeledge were organized.

■ CHEMFEST 2K15



Inauguration of CHEMFEST 2K15

Department of Chemical Engineering organized a two day National Level Technical Symposium, CHEMFEST 2K15, on 9th and 10th March 2015. The Symposium included various competitions like Paper Presentation, Model Making, Poster

Painting and Quiz Contest, Industry defined problems and an Advertisement. The event promoted the theme of "Engineering India". The Symposium was inaugurated at the hands of Chief guest Dr. V. G. Pangarkar, Ex-Professor of ICT, Mumbai and honourable Principal Dr. K. N. Nandurkar. Mr. Chandrakant Mohikar (Petro-project Consultant), Mr. Ajit Tambe & Mr. Yogesh Lawand from Graphite India Pvt., Ltd., Ambad, Nashik, Mr. Rohan Pawar, RAP Consultancy and Mr. Rushikesh Bhandari, Purchase House, Ambad, Nashik were among the panel of judges for various events. Chief Guest of the Valedictory function Mr. B. P. Sonar, Director of Abeline Polymers, Ambad, Nashik distributed prizes to all the winners. The total registrations for various events in CHEMFEST 2K15 were around 600.

■ ITiazza'15



Inauguration of ITiazza'15

The Dept. of Information Technology hosted one day National Level Technical Symposium, ITiazza'15, on 10th March 2015. The Symposium comprised of C-Programming, Aptitude Test, Group Discussion Contest, Quiz Contest, Poster Competition, assembling of CPU contest, PCHunt, Photograph and Gaming Competition. The event promoted the theme of "Make in India". The Symposium was inaugurated at the hands of Principal Dr. K. N. Nandurkar. Prof. J. P. Shah, Electrical Dept. and Mr. Tushar Kumawat, Dreamviewer Nashik were among the panel of judges for various contents. Cash Prizes worth Rs.25,500/- were distributed at the hands of the Chief Guest of the Valedictory function, Mrs. Dipti Kulkarni, Strategy Design Manager, Start Up Boot Simply Solution, Ltd. and Prajakta Somani, Sr. Developer, ESDS, Nashik. The total registrations for various events in ITiazza-15 were 698.

■ LMC Meeting

Meeting of Local Managing Committee of the Institute was held in the Central Office of K. K. Wagh Education Society on 27th March 2015. Dr. Omprakash Kulkarni and Prof. Suraj Jhawar were

continued on page 4

present along with Hon. Shri. Balasaheb Wagh, President, K. K. Wagh Education Society, other Hon. Trustees and Elected Members.

■ A Lecture on Autonomy by Dr. Mrs. Sushma Kulkarni

In view of Institute planning to go for autonomous status in near future, lecture on "Autonomy for Institute" was organized in Institute by Dr. Mrs. Sushma Kulkarni, Director, RIT, Islampur. She explained in detail about the procedure for getting permission of autonomy from government Dr. Telsang, Dean Academic, RIT explained the benefits of being an autonomous Institutes. For this lecture Secretary Prof. K. S. Bandi, Principal Dr. K. N. Nanadurkar, All Principles of various polytechnics and other colleges run by K. K. Wagh education society, Heads of department and senior faculty were present.

■ M & M Visit By ISTE Student Chapter



M&M visit by ISTE student chapter

ISTE Students chapter of KKWIEER organized Industrial visit to Mahindra and Mahindra Plant, Nashik on 17th March 2015. Around 45 students from different departments participated in this visit. Students from first year to final year of Engineering were present. Starting with the presentation about M&M they showed and explained actual plant operations to the students. They explained the assembly of different parts for different kind of four wheelers. Students also gained the knowledge related to their field. Ms. Prajakta Vispute (ISTE student's chapter Faculty Advisor) with Mrs. Tejal Kale (T&P Cell) accompanied students for this Visit.

■ Health Awareness Session by doctors from Madhavbaug and checking

Health awareness lecture on "Diet & Health" was organized in the institute on 26th March 2015 by Dr. Anandi Sathe and her colleagues from Madhavbaug for staff and students of the Institute. On this occasion the free health check was done by the Doctors.

■ Karmaveer Sports Festival



Prize distribution by hands of Cricket Coach Shri. Makrand Oak

As a part of Hon. Balasaheb Wagh Sahashtra Chandra Darshan Sohala a state level Invitational Tournament has been completed. This was organized by Gymkhana department of our Institute. This Tournament was organised by Department of Physical Education of our Institute. This year we had organised 5 games: Cricket, Football, Basketball, Volleyball and Lawn Tennis. Tournament was completed on 2nd March 2015. The closing ceremony was conducted in presence of Cricket Coach Shree Makrand Oak, owner of world of cricket shop. Cricket total team participation: 12, Volleyball participation: 10, Basketball team participation: 9, Football team participation: 13 and Lawn tennis participation: 15. All the sports were played league-wise. Certificates of the Karmaveer Sports Fest were distributed to winner Colleges.

■ Teachers - Parents Meet

The teachers parents meet was conducted on Saturday 7th March 2015 for those F.E. Students whose attendance was less than 75% overall up to 28th Feb. 2015 in this Institute. There was good response of parents. Class-coordinators discussed with parents, various issues related to attendance of their wards. Many parents appreciated for such awareness activity of institute. The meet conducted under the guidance of Principal Dr. K. N. Nandurkar.

■ Congratulations

Indian Society for Technical Education organized National level Ramanujan Mathematical competition at Mumbai. Ms. Surbhi Sachadev from Second Year Mechanical department secured consolation prize at National level worth Rs. 5000/- and Trophy on 24th March 2015. This competition is conducted at 3 levels. Initially at college level, then zonal level and then at national

continued on page 5

level. Ms. Surbhi secured first prize at zonal level of Rs. 3000/-. College level and zonal level rounds were conducted by ISTE student's chapter KKWIEER in the college premises only.

Expert Lecture/Seminar/Courses/Worshop Organized:

- Electronics & Telecommunication department organized an expert talk of Shri. A. S. Mohgaonkar, Asst. Prof. MBA dept. KKWIEER, Nashik on "Entrepreneurship Development" on 03/03/2015, an expert talk of Shri. Sagar Nikam, Director ELC, Nashik, Expert Lecture on "Personality Development" on 04/03/2015 and and one day workshop of Mr. Dattatraya Shinde on "Automation Studio Software" on 17/03/2015 & 18/03/2015. Same department also organized One day workshop on "Hands on Arduino basics-interfacing and programming" on 18/03/2015 by Mr. Pravin Ambekar, Director of Ambekar associates, Aurangabad and two day workshop of Mr. Satish Jadhav, Biokit, Mumbai on "Sensors Instrumentation and Embedded system training" on 31/03/2015.
- Civil Engineering department organized an expert lecture of Mr. Pravin Patil, Manager Customer Support, Ambuja Cement, Nashik Office on "Concrete Mix Design" on 24/03/2015, an expert lecture of Ajinkya Magar, Consultant on "Innovative Techniques in RCC construction" on 27/03/2015 and an expert lecture of Mrs. Rajni Deshmukh, Executive Engineer, Irrigation Department, Nashik on "Methods of execution of construction works in government departments: Contracts in Civil engineering project" on 28/03/2015 and 30/03/2015. Same department also organized an expert lecture of Mr. Durgesh Puranik, Design Concrete India Pvt., Ltd., Nashik on "Concrete Mix Design" on 31/03/2015.
- Electrical Engineering department (first shift) organized an expert talk of Mr. Chairesh Patil, Scheinder on "Harmonic Mitigation" on 03/03/2015 and an expert talk of Mr. Dipajan Dey, Mahindra & Mahindra on 'Automatic Robotic Manufacturing' on 27/03/2015. Electrical Engineering department (second shift) organized a IET PATW (Presentation Around The World) 2015 (Institute Level) on 23rd and 28th March 2015.
- Chemical Engineering department organized an expert talk of Dr. V. G. Pangarkar, Ex Professor of ICT, Mumbai on "Innovations in Chemical Engineering" on 09/03/2015, an expert talk of Mr. B. P. Sonar on "Entrepreneurship Skills" on 10/03/2015

and an expert talk of Mr. Sagar Nikam on "Communication Skill" on 24/03/2015. Same department also organized an expert talk of Dr. V. V. Mahajani (Ex. Professor of ICT Mumbai and an advisory member of our Institute) on "Sustainability via Green Technology" on 25/03/2015 and an expert talk of Dr. Anand Patwardhan (Professor of ICT Mumbai) on "Critical thickness of insulation for heat exchanger" on 31/03/2015.

- Information Technology Department organized a three day workshop on "Oracle Forms and Reports" under KPIT Pace Program for Oracle 10g training by Mr. Abhinandan Chivate, Tech Mahindra, Pune from 13th to 15th March 2015.
- MCA department organized an expert lecture of Mr. Tushar Maheshwari from Knowledge Factory Pvt., Ltd., Pune on Web development using HTML5 and CSS3 and a workshop on Ethical Hacking and HTML5 from 18th to 20th March 2015.
- MBA department organized an expert lecture of Mrs. Nalini Kulkarni (CEO, Amol Industries) on 'Women entrepreneurship' on 07/03/2015.

Industrial Training/Workshop/STTP Attended By Staff:

- Mechanical Engineering staff Prof. N. S. Ahirrao attended National Workshop on "Research Methodology" at MIT Aurangabad during 13th to 14th March 2015.
- Information Technology department staff Prof. Ms. Poonam Mahale attended cPGCON-15 conference on 14th March 2015 organized by MET's College of Engineering, Nashik & BOS SPPU, Pune. Same department staff Prof. Ms. S. R. Deshmukh attended One Week ISTE STTP on "Introduction to Design of Algorithms" during 16th to 20th March 2015, organized by IIT Kharagpur in association with ISTE and MHRD, India.

Industrial Visits Organized For Students:

Date	Class	Name of Company
03/03/2015	B.E. Civil	Plumbing Lab. of COEP, Pune
04/03/2015	B.E. E. & T.C.	Multiquadrant Industrial Controls (I) Pvt., Ltd., Nashik
07/03/2015	T.E. Computer	Persistent System Pvt., Ltd., Pune
18/03/15 to 20/03/2015	T.E. Mechanical (Div.- A,B,C.)	Bara Bangla Pumping Station, Eklahare
24/03/15 to 26/03/2015	S.E. Mechanical (Div.- A,B,C.)	MSRTC Workshop, Peth Road, Nashik
26/03/2015	S.E. Chemical	Sula Wines Ltd., Nashik
26/03/2015	T.E. Mech. (Div.- A,B.)	Forchuna Engg. Pvt. Ltd. Ambad.
27/03/2015	T.E. Mech. (Div.- C.)	Ring Plus Aqua Pvt. Ltd. Sinner.
31/03/2015	T.E. Civil	Water Treatment Plant at Bara Bunglow, Nashik

continued on page 6

■ Training & Placement :

Name of Company	Name of the Dept.	No. of students selected
Infosys BPO	Mechanical	09
	Computer	03
	Electrical	03
	E&TC	01
	IT	01
Datamatics	Computer	03
	Electrical	04
FIN IQ	Mechanical	06
	Computer	03
	Electronics	02
	Chemical	02
	IT	04
Vodafone	MBA	03
Wipro Technologies	MCA	02

■ Paper Presented by Students

In the month of March 2015, 131 students of various departments of our Institute participated in various paper presentation, model making, quiz, poster presentation, advertisement competitions which organized by our Institute as well as organized by other institutes of Maharashtra and India. Many of them have received the first, second and third prizes.

■ CONGRATULATION



Mr. Narhari Dattatraya Chaudhari, Associate Professor of Civil Engineering Department received Ph.D. from Savitribai Phule Pune University. His topic was "data driven approach for daily pan evaporation modeling" under

the guidance of Dr. Kanchan C. Khare and Dr. S. N. Londhe.

■ CONGRATULATION



Prof. R. K. Munje of Electrical Engg. department has completed Ph.D in Electrical Engineering from Swami Ramanand Tirtha Marthawada University, Nanded.

■ Other Achievements

- Principal Dr. K. N. Nandurkar was invited for an expert for delivering lecture during one day Workshop on "Role of Management in Higher Education" organized by Arts, Commerce and Science College, Nashik on 27/03/2015.
- Prof. Dr. S. S. Sane, Head of Computer Engineering has delivered a Keynote address in CPGcon, a Conference for PG students to present their research papers. Same departmental staff Prof. Mrs. Snehal M.

Kamalapur, Prof. N. M. Shahane and Prof. S. S. Banait were appointed as a session chairs for the conference. Prof. Ms. Rutuja H. Jadhav has judged a Project Competition at KBTCOE, Nashik on 17th March 2015 on the occasion of their National event "MVP-KSHITIJ- 2015". Prof. Mrs. Jyothi Mankar has judged a paper presentation Competition at Sapkal College of Engineering at 27th March 2015. Prof. Lalit Patil has been invited as a judge for DIPEX, a state level Project competition for diploma, UG and PG students.

- Electronics & Telecommunication engineering department Head Prof. Dr. D. M. Chandwadkar delivered expert lecture on "Power Electronics" at Cummins College of Engg., Pune on 3rd March 2015. He also delivered expert lecture on Power Electronics at Maratha Mitra Mandal's College of Engg., Pune on 2nd March 2015.
- Electrical Engineering department Head Prof. Dr. B. E. Kushare offered Energy Audit services to Times of India, Bangalore, HPCL, Hassan, EPCOS Ltd., Nashik. He also delivered an expert lecture of state Level Seminar on 'Emerging Trends in Electrical Engineering', SPARK 2K15 which organized by Amrutvahini COE, Sangarnner. Same department staff Prof. J. P. Shah won 3rd prize at IIT Delhi on Topic: "Space Settlement for Venus" during an event "Asgard-Model Submission"

■ Abstracts of papers presented during March 2015: Spatial mapping of pan evaporation using linear genetic programming

Dr. N. D. Chaudhari, Shreenivas Londhe, Kanchan Khare

(Published paper in International Journal of Hydrology Science and Technology, Vol. 4, No. 3(2014) Page No. - 234-244)

Abstract: Daily pan evaporation is of utmost importance in planning and managing water resourcet" The present paper involves estimation of daily pan evaporation at a particular climatic station using daily pan evaporations of surrounding ten climatic tations covering six districts of Maharashtra state (India) with variation in elevations and weather. The surrounding stations were added one by one based on the correlation of each station with the output station. The soft computing technique of

continued on page 7



linear genetic programming was employed for this spatial mapping exercise. The models were developed for each station as output station (total 11) with the remaining stations (1 to 10) as inputs added one by one. In all 110 LGP models were developed to examine the ability of linear genetic programming to work as virtual pan as and when existing evaporimeters become inoperative. The best LGP model was for Suksale station with coefficient of correlation ($r = 0.94$) between observed and estimated pan evaporation. This will retrieve the missing evaporation data at one location using data at other locations.

■ **Implementation of Robust HOG-SVM based Pedestrian**

Dr. Prof. S. A. Patil (Ugale)

(Published in International Journal of Computer Applications (0975 - 8887) Vol. 114 - No. 19, March 2015, ISBN: 973-93-80885-86-6)

Abstract: Achieving pedestrian protection by means of computer vision is not a new topic in the field of computer vision research; however it is still being pursued with renewed interest because of the huge scope for performance improvement in the existing systems. Generally, the task of pedestrian detection (PD) involves stages such as pre-processing, ROI selection, feature extraction, classification, verification/refinement and tracking. Of all the steps involved in the PD framework, the paper presents the work done towards implementing the feature extraction and classification stages in particular. It is of paramount importance that the extracted features from the image should be robust and distinct enough to help the classifier distinguish between a pedestrian and a non-pedestrian, while a good classification algorithm would go a long way in precisely identifying a pedestrian as well as in simplifying the verification stage of the PD framework. The presented work focuses on the implementation of the Histogram of Oriented Gradients (HOG) features with modified parameters that can represent accurate intrinsic information of the image. Classification is achieved using Support Vector Machine (SVM). However instead of employing a readily available SVM library, the linear SVM implemented uses the Sequential Minimal Optimization (SMO) algorithm. The results observed by this HOGSVM combination show promise to be the best feature

extraction cum classification module for a full-fledged PD system.

Keywords: Pedestrian detection, Feature extraction, Classification, HOG, SVM, SMO.

■ **Association Rule Mining Approaches**

Prof. Prajakta Vispute

(Presented in PG Conference (cPGCO -15) organized by MET COE, Nashik in association 30 SPPU, Pune on 14 March 15)

Abstract: Data mining refers to extracting knowledge from large amount of data and it is one of the steps in the knowledge discovery process. Association rule mining is one of the important and popular data mining methods, which is used to find frequent patterns in the given dataset. The Apriori and FP-tree algorithms are the most common and existing frequent itemsets mining algorithm, but these algorithms lack incremental learning ability. Incremental learning ability is desirable to solve the temporal dynamic property of knowledge and improve the performance of the mining process, as the incremental data is available with the passage of time. Currently Fast Updated Frequent Pattern Tree (FUFP), pre-FUFP, Incremental Mining Binary Tree (IMBT) and Item-Itemset Incremental Learning Algorithm(I-IsILA) algorithms have been developed that support incremental learning. In this survey paper different batch and incremental association rule mining algorithm are discussed and compared based on different parameters.

■ **Clustering and Retrieval of Video Lecture content by Speech and Text Information**

Prof. Ashwini Kothawade

(Presented in PG Conference (iPGCON -15) on Amrutvahini College of Engineering, Sangamner & BOS SPPU, Pune on 24 March, 2015)

Abstract: Nowadays video lecturing is becoming more and more popular due to its various advantages than classroom learning. Many institutes and organizations are using this method for learning. So there is an enormous amount of data available in video lecturing form. To extract the exact video and exact information through this vast information collection is a tedious task. In this paper we introduce the techniques for automatically retrieving the information from video files to collect it as a metadata for those files. For efficient retrieval of



text from videos by the OCR (Optical Character Recognition) tool and retrieval of speech information by using the ASR (Automatic Speech Recognition) tool is used. First of all we do segmentation and classification of video files for extracting the keyframes. Then the OCR and ASR tool is used for collecting the information and it will be stored as a metadata for the file. At last, we provide the efficient browsing for these videos by using the clustering and ontology concept.

Keywords: OCR, ASR, Content retrieval, tesseract OCR, indexing to video lectures

■ Abstracts of papers presented during April 2015:

Nonlinear transient response of rough symmetric two lobe hole entry hybrid journal bearing system

Prof. P. B. Kushare

(Presented paper in Journal of Vibration and Control (Sage Publication))

Abstract: The present paper describes the effect of surface roughness orientation pattern on the nonlinear transient response of symmetric two lobe capillary compensated hole entry hybrid journal bearing. Nonlinear equations of motion have been solved with the Runge-Kutta method. The stability of the journal bearing system has been studied by obtaining the journal center motion trajectories. The results of the study reveal that the surface roughness pattern significantly changes the stability of capillary compensated two lobe hole entry hybrid journal bearing. Hence, from the bearing stability point of view, a proper selection of the surface roughness pattern and bearing geometry is essential.

■ **Design and analysis of a multi spindle drill gearbox Torque divider**

Prof. R. V. Bhandare

(Published paper in International Journal on Recent Technologies in Mechanical and Electrical Engineering (IJRMEE) ISSN: 2349-7947, Volume: 1 Issue: 4029-033)

Abstract: Gearboxes play an important role in many applications. One of the important applications is in multi spindle drilling machine. So, it is necessary to study and analyze the gearbox. In general, gear analysis includes calculations of the tooth stresses, failures due to

bending, wear or scoring by considering both the beam strength and fatigue strength. In the multi spindle drilling machine, smooth functioning of the gearbox is of utmost importance. This paper gives the design and analysis of the gearbox of a special purpose machine for drilling application. In this paper, bending stress analysis will be performed on different size spur gears to investigate the weakest portion against bending. Then bending stresses calculated using ANSYS 15 workbench, are compared to the results obtained from existing or theoretical methods.

Keywords : Beam Strength, Multi Spindle, Bending Stress, fatigue strength, ANSYS 15.

■ **Clustering and Retrieval of Tele -Lecture Content**

Prof. Ashwini Y. Kothawade

(Publish paper in International Journal of Scientific, Engineering and Research (IJSER), ISSN (Online): 2347-3878, Volume 3 Issue 4, April 2015.)

Abstract: Nowadays video lecturing is becoming popular due to its various advantages than classroom learning. Many institutes and organizations are using this method for learning. So there is an enormous amount of data available in video lecturing form. To extract the exact video and exact information through this collection of information from videos is a tedious task. In this paper, we introduce the techniques for automatically retrieving the information from video files to collect it as a metadata for those files. For efficient retrieval of text from videos we use the OCR (Optical Character Recognition) tool to extract text from slides and ASR (Automatic Speech Recognition) tool for retrieval of speech information from the speaker. First of all we do segmentation and classification of video files for extracting the key frames. Then the OCR and ASR tool is used for collecting the information and it will be stored as a metadata for the file. At last, we provide the efficient browsing for these videos by using the clustering and ontology concept.

Keywords : OCR, ASR, Content retrieval, e-learning, tele-lecture, Tesseract OCR, indexing to video lectures

Prof. Dr. K. N. Nandurkar
PRINCIPAL

