# One Week Workshop on "Optimization Aspects of Robotics and Computer Integrated Manufacturing"



One Week Workshop on "Optimization aspects of Robotics and Computer Integrated Manufacturing"

Department of Production Engineering organized One Week Workshop on "Optimization aspects of Robotics and Computer Integrated Manufacturing" during 16 - 20 Jan 2016. The main objective of this workshop was to promote the applications of optimization methods in the field of Robotics and Computer Integrated Manufacturing. The training program provided a forum in which the participants could obtain information about recent advances about various optimization methods and decision making methods having wide potential in engineering research and also learn about the needs of engineering sciences and successful applications of these methods related to Robotics and Computer Integrated Manufacturing. About 30 participants including faculty members of various engineering colleges/polytechnics in Maharashtra as well as research scholars attended this workshop. The inauguration function was carried out the hands of Dr. R.

Balasubramaniam (Head, Precision Engineering, BARC, Mumbai). Dr. S. V. Ramagopal (Former Chief Scientist, Central Scientific Instruments Organization, Chandigarh) was guest of honor. Practical case studies related to Robotics and Computer Integrated Manufacturing were discussed in the training program to close the gap between theory and the practice of engineering using these methods. Principal Dr. K. N. Nandurkar delivered welcome speech. Mr. Pritish Chandratre, Managing Director, Rhythmsoft Robotics & Automation Pvt., Ltd., Nashik, Mr. Vikas Patil, Manager. Mahindra & Mahindra Ltd., Nashik, Mr. Ravi Mahadeokar, Managing Director, Summit Engineers & Consultants Pvt., Ltd., Nashik, Prof. Dr. S. B. Chandgude and Prof. Dr. P. J. Pawar were resource persons for this workshop.

#### ■ State level elocution competition "Vijigisha"



Prize distribution 'VIJIGISHA'

A state level intercollegiate elocution competition, 'Vijigisha 2015-16' was organized by ISTE Students Chapter of K. K. Wagh Institute of Engineering Education and Research, Nashik on 7th Jan., 2016. The Competition was organized in two languages English & Marathi and received a great response of around 125 participants. The competition was inaugurated in the morning by Dr. K. N. Nandurkar, Principal and Dr. S. S. Sane, Vice Principal, K. K. Wagh Institute of Engineering Education and Research,



Nashik. The Judges for English category were Prof. S. R. Kulkarni, Mr. A. K. Dixit, Ms. Usha Kiran Pishreddy and Mrs. Yogita Bhamare. Similarly in Marathi category judges were Mrs. Anagha Kulkarni and Dr. Asmita Deshpande. The Prize distribution ceremony was conducted in the evening. Mrs. Vrinda Bhargave was the chief guest for the function, she appreciated the efforts taken in organizing the competition and said that such platforms were necessary for the students to showcase and polish their speaking skills Mr. Vinay Kataria and Ms. Irene Francis and Ms. Deepa Pokar secured the 1st and 2nd prizes respectively in the English Category. Ms. Chinmayee Shaligram and Ms. Devanshi Dattani grabbed the consolation prizes. In the Marathi Category Ms. Mahima Thombre and Mr. Mahesh Kedar secured the 1st and 2nd prizes respectively and Mr. Prasanna Bacchav and Mr. Rahul Mahajan grabbed the consolation prizes. ISTE faculty advisor P.S. Vispute and ISTE students' chapter students took efforts to conduct the event successfully.

#### MAFFICK-2016



Inauguration of Maffick- 2016



Cultural activities of Maffick-2016

Annual social gathering "Maffick-2016" of our Institute was held during 11<sup>th</sup>-14<sup>th</sup> January 2016. Various events such as Cultural, Fashion Show, Personality Contest etc. were meant to highlight the hidden skills possessed by our students.

During this Maffick, events like Rangoli competition, Cartoon and Poster drawing, Antakshari, Nakshatrache Dene, Essay, signature, Ad-Mad, Picture perception competitions were conducted with good participation from the students of our Institute. The cultural events like singing, dance, personality contest and fashion show were also conducted during these days in pendol. Inauguration of cultural events was held on 13th January 2016 by the hands of Vice Chairman of K. K. Wagh Education Society Shri. Kashinathdada Tarle. Trustee Shri. D. S. Shinde. Prof. Dr. S. S. Sane, Maffick Coordinator Prof. A. S. Kamble, Prof. Vilas Patil, General Secretary Mr. Shushant Patil, other staff and students were present on this occasion.

#### **■** Governing Body Meeting



Governing Body Meeting

On 23<sup>rd</sup> Jan. 2016 Governing Body meeting of the Institute was held in Central Office under the chairmanship of Hon. Shri. Balasaheb D. Wagh, President, K. K. Wagh Education Society Nashik. Shri. D. P. Nathe, Joint Director, Technical Education Regional Office, Nashik, Mr. Shrikant R. Karode, Senior Consultant, Prof. Dr. K. N. Nandurkar, Prof. Dr. S. S. Sane and other members were present for the meeting.

#### Republic Day Celebration



Flag hoisting on occasion of Republic day

The Republic day was celebrated with full honour on 26th January 2016. The flag was hoisted at the hands of Miss. Riti (Daughter of Rashmiben Udeshi). Other relatives of Hon. Ashokbhai Merchant in cluding Mrs. Rashmiben, Mr. Pankaj

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Bhai and Mrs. Meeraben were also present for flag hoisting ceremony. Principal Dr. K. N. Nandurkar gave message to all present. All staff members from various Institutes of this campus and students from hostels were present.



Guests attending the Republic day program

#### **■** Expert Lecture/Seminar/Courses/Worshop Organized:

- Computer Engineering Department organized an Expert talk on Python Programming by Mr. Anibhav Yadav, Software Engineer, KPIT Technologies, Pune on 9<sup>th</sup> January 2016 and an Expert Talk on "IOT Technology and Smart devices Programming and details of IOT Technology course offered by InteliDemics" by Dr. R. S. Tiwari on 28<sup>th</sup> January 2016.
- Production Engineering Department organized an interactive session of Mr. Sameer Dohole of Atlas Copco Ltd., Nasik on the topic "Supply Chain management" on 23/01/2016 and an expert talk on the topic "Role of eternal energy for stress management" by Mr. S. B. Patil, Vice President, S. S. Chemicals, Bhilai, CG, India on 30/01/2016.
- Electronics and Telecommunication Department organized an Expert lecture on "Contribution of Savtribai Phule & revolution in India" by Mr. S. S. Sawant on 03/01/2016 and an Expert lecture on "Industrial Design & Product design as applied to Electronic products" by Mr. Pravin P. Ambekar on 05/01/2016. Same department also organized One day workshop on "Antenna Design, Fabrication and Link Budget" in association with Mihir Entreprises on 19/01/2016 and an orientation session on "IEEE Blended learning" by Mr. Danodara M.S., IEEE, Bangalore on 23/01/2016. Same department also organized Workshop on "Simulation of Power Electronics Circuits" in association with IIT Mumbai by Prof. M. B. Patil, IIT Bombay from 23 to 24th January 2016 and an Expert lecture on "Applications of

- Embedded Processors in industries" by Mr. Sanket Karlekar. Similarly Department organized Aptitude and Logical reasoning training by FACE Academy for students from 29/1/2016 to 02/02/2016.
- Chemical Engineering Department organized an Expert Talk on "Recent Trends in Polymer Industries" by Mr. B. P. Sonar, Director, Abeline Polymers, Nashik on 04/01/2016, an Expert Talk on "Design of Packed columns" by Prof. Dr. V. G. Pangarkar, Ex-Professor, ICT, Matunga on 05/01/2016 and an Expert Talk on "Opportunities in abroad- Requirements and Prospectives" by Mrs. Smita Bhamare, Director, Step Ahead Study Abroad Consultancy on 19/01/2016. Same department also organized an Expert Talk on "Performance of Process Systems for energy security & Sustainable Development" by Mr. Chandrakant R. Mohikar on 20/01/2016 and an Expert Talk on "Innovative approach in the field of renewable energy" by Dr. Pramod Pathak, Goa Energy Development agency, Goa on 25/01/2016. Same department also organized an Expert Talk on "Distillation-Innovative Ideas" by Dr. V. V. Mahajani, Ex-Professor of ICT Mumbai on 30/01/2016.
- Information Technology Department had organized a session on "Studying in Abroad" by Mr. Dinesh Modi, Alumni of I. T. Dept. (Batch 2013), currently working as a Technology Consultant at Cummins, Minneapolis, USA on 8<sup>th</sup> January 2016 and a seminar on "Introduction to Big Data Hadoop" by Mr. Rahul More, Team Lead and Mr. Sandeep Patil, Sr. Developer, Winjit Technologies, Nashik on 27<sup>th</sup> January 2016. Same Dept. conducted one day workshop on "PL / SQL programming" under KPIT Pace Program for Oracle 10g training on 9<sup>th</sup> January 2016 and one day workshop on "Java programming" under KPIT Pace Program for Oracle 10g training on 30<sup>th</sup> January 2016.
- MCA department organized Expert Lecture on "Bridging the gap of C++ between Industry and Academia" by Mr. Vijay Gulati. Cognizant, Pune on 9th Jan. 2016. Expert Lecture on "Object Oriented Javascript and Phonegap" by Mr. Aveg Patekar. Extentia Information Technology, Pune on 23th Jan. 2016. Similarly, Expert Lecture on "Selenium Tool of Software Testing" by Mr. Saad Khan, Freestone Infotech, Mumbai on 30th Jan. 2016.



 F.E. Parent- Teacher Meet was organized by Applied science and Math department on 30 January 2016 in the institute. Principal Dr. K. N. Nandurkar, Head of Applied Science and Math department, parents and staff were present for the meeting.

# ■ Seminars/Workshop/Training attended by Staff:

- Dr. K. N. Nandurkar attended a meeting of Principals organized by Savitribai Phule Pune University regarding the convocation ceremony to be held at College level. The meeting was held on 9<sup>th</sup> Jan. 2016 at K.T.H.M. College, Nashik.
- Dr. K. N. Nandurkar attended the 3<sup>rd</sup> International Conference on Transformation in Engineering Education organized by Indo-US Collaboration for Engineering Education (IUCEE) at College of Engineering, Pune during 10-12 Jan., 2016.
- Computer Engineering Department staff Prof. Khalid F. Alfatmi attended FDP on "High Performance Computing and Cloud Computing" organized MIT Pune from 5<sup>th</sup> to 9<sup>th</sup> January 2016. Similarly same department staff Prof. Sumedha K. Chumble attended "Android Application Development" workshop at SCOE, Pune from 22<sup>nd</sup> to 23<sup>rd</sup> January 2016.
- Electronics and Telecommunication Departmental Head Prof. Dr. D. M. Chandwadkar attended Two days Workshop on Outcome-Based Education conducted jointly by BMS College of Engg., IUCEE & Inpods at Dr. D. Y. Patil Institute of Engineering and Technology, Pimpri Chinchwad, Pune from 9 to 10<sup>th</sup> January 2016. Prof. V. R. Takate attended Faculty orientation programme on "AV Engineering" at D. Y. Patil C. O. E. Pimpri Chinchwad on 6/01/2016. Prof. D. C. Shimpi and Prof. K. S. Navale attended Two Days workshop on "Simulation of power electronics circuits" organized by E & TC dept. in collaboration with IIT Mumbai from 23/01/16 to 24/01/16. Prof. S. D. Patil and Prof. P. P. Patil has attended Two days workshop on "Advanced topics in Control Systems" organized by NDMVP Samaj's K.B.T. College Engineering, Nashik from 27/01/16 to 28/01/16. Prof. S. P. Munot and Dr. Sunita A. Patil has attended Seminar on "COMSOL Multiphysics 5.2" arranged by IT department on 22/01/2016.
- Production department staff Prof. A. B. Bhusnar attended a workshop on training of

- "COMSOL" simulation software on 22/01/2016. All staff members of the Department attended an interactive session of Mr. Sameer Dohole of Atlas Cop Co Ltd., Nasik on the topic Supply Chain management on 23.01.2016 & a an expert talk on "Role of eternal energy for stress management" by Mr. S. B. Patil, Vice President, S. S. Chemicals, Bhilai, C.G, India on 30.01.2016
- Prof. S. S. Dhamal of Electrical Engineering attended one week STTP at SVNIT, Surat during 28/12/2015 to 01/01/2016 on the topic "Simulation and modeling in Power System Engineering". Prof. N. N. Jangle and Prof. S. A. Sagare of same department attended 06 days workshop at MGM's Jawaharlal Nehru Engineering College, Aurangabad during January 27, 2016 to February 01, 2016 on topic "Elements of Document Composition and Presentation Using LaTeX". Same department staff Prof. S. M. Akolkar, Prof. N. L. Potdar and Prof. Ms. R. A. Ahire attended one week workshop at Bharati Vidyapeeth, Pune during 18 - 23 Jan., 2016 on topic "PLC SCADA & HMI".
- Chemical Engineering staff Prof. Tejmal B. Mahale attended a workshop on training of "COMSOL" simulation software on 22/01/2016.
- MCA Departmental Staff Prof R. A. Gangurde and Prof. A. B. Zambare have attended 1-week Short Term Training Program on "Android App Development" at Guru Govind Singh Polytechnic, Nashik from 25<sup>th</sup> to 30<sup>th</sup> Jan. 2016.

### Training & Placement :

| Name of Company     | Name of the Dept. | No.of students selected |
|---------------------|-------------------|-------------------------|
| SECO/WARWICK Allied | Mechanical Engg.  | 04                      |
| Pvt., Ltd.          | Electrical Engg.  | 01                      |
| Workz Group, Dubai  | Production Engg.  | 05                      |
| Videocon-Aurangabad | Mechanical Engg.  | 06                      |
|                     | Production Engg.  | 01                      |
| GS Lab., Pune       | Computer Engg.    | 03                      |
|                     | IT                | 01                      |

#### Other Achievements

- Principal Dr. K. N. Nandurkar was invited as Chief Guest for the valedictory session of 5 days FDP on 'English Language & Communication' organized by K. K. Wagh Women's Polytechnic, Nashik on 1<sup>st</sup> Jan. 2016.
- Principal Dr. K. N. Nandurkar was appointed as Co-ordinator for BOS (Production and Industrial Engineering) by Savitribai Phule Pune University.

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- Computer Engineering Department head Prof. Dr. S. S. Sane has been elected as Regional Vice President for CSI Region VI (Maharashtra & Goa) recently held CSI Elections. He also delivered Keynote address on "Cloud in Education" at G. D. Sawant Arts, Science and Commerce College, Nashik on 16th January 2016 during the Inaugural function of 2 days State level workshop on Cloud Computing. He inaugurated National Level Workshop on Hadoop-Python-MangoDB and delivered Expert Talk at SVCOE, Chincholi on 29th January 2016. He was also the Chief Guest of Valedictory function for 5 Days STTP on Android Application Development and delivered talk on "Android Apps" at Guru Govind Singh Polytechnic on 30th January 2016.
- Prof. P. P. Vaidya and Prof. S. T. Patil of Computer Engineering department delivered an expert talk on "Operating System Security" under the "Skill Development Programme" on 06<sup>th</sup> January 2016 at B Y K College of Commerce, Nashik.
- Electronics and Telecommunication Departmental head Prof. Dr. D. M. Chandwadkar has been selected as a member of BOS, SP Pune University.
- Prof. Dr. P. J. Pawar of Production Engineering has delivered an expert lectures on "Advanced Cognitive and other Optimization Techniques" at Jawaharlal Nehru Technological University (JNTU), Hyderabad during. 8-9 Jan. 2016.

#### CONGRATULATION



Mr. Kailas Shankarrao Holkar, Associate Professor of E & TC Engineering Department awarded Ph. D award from Swami Ramanand Teerth Marathwada University, Nanded. His research topic was "Investigations of some predictive

control strategies for improved process performance", under the guidance of Dr. L. M. Waghmare (Director, S.G.G.S.I.E & Technology, Nanded.

He also received an award of "Gunwant Adhyapak" of the Engineering faculty from Savitribai Phule Pune University in presence of Hon. Ex. President of India Smt. Pratibhatai Patil and at the hands of Hon. Vice Chancellor of Pune University Dr. Vasudev Gade on 10<sup>th</sup> Feb. 2016 (University Foundation Day).

#### CONGRATULATION



Prof. S. S. Morade Associate Professor of E&TC department awarded Ph.D. from SVNIT Surat. His topic was "Analysis of Visual Lip Features for Digit Reading" under the guidance of Dr. Suprava Patnaik

#### CONGRATULATION



Prof. P. D. Dhake Assistant Professor of Civil Engineering department awarded Ph.D. from SVNIT Surat. His topic was "Anchorage strength and Behavior of Headed bars in Exterior Beam Column Joint" under the guidance

of Dr. Dr. H. S. Patil and Dr. Y. D. Patil.

# CONGRATULATION



Mr. Digvijay Sonawane, Second year Computer Engineering student was awarded the Best Sportsman of the year 2015 (Fencing) prize by District Sports Office, Nashik. He received the award at the hands of

Hon. Shri. Girish Mahajan, Cabinet Minister of Water Resources and Guardian Minister of Nashik District on the occasion of Republic day (26<sup>th</sup> Jan.).

### ■ Abstracts of papers presented during Jan. 2016:

# A Novel Approach for Finding Representative Pattern Sets

(Published paper in, IJSRD - International

Neha Chaure & Prof. Dr. S. S. Sane

Journal for Scientific Research & Development, Vol. 3, Issue 11, 2016, ISSN (online): 2321-0613) **Abstract:** Frequent pattern mining produces large number of frequent patterns. It creates challenge on visualizing, understanding and further analysis of generated patterns. So there is need for finding a small number of representative patterns without affecting understanding and analysis of generated patterns. Few algorithms have been reported in the literature that satisfies these needs. However, these algorithms result in either higher time or space complexities and also do not scale well with the size of frequent patterns. An approach that overcomes the problem of time and space complexity has been reported in the literature that allows the user to select the trade-off between space and time. However, with large size of frequent patterns, an





incremental approach should perform in a better way. This paper deals with the development and analysis of an efficient incremental algorithm for finding representative pattern sets.

# ■ A Survey on Efficient Selection of Subset of Feature Technique on HDSS Data

Apurva Chaudhari & Prof. Satish S. Banait (Published in IJSRD - International Journal for Scientific Research & Development Vol. 3, Issue 11, 2016, ISSN (online): 2321-0613)

**Abstract:** Feature subset selection has the main attention of the research in the areas for which datasets possess high dimensional variables. During Classification, the high dimensional feature vectors of microarray data impose a high dimensional cost and the risk of over fitting. Hence there is a necessity to reduce the dimension with the help of feature selection. This survey paper considers Feature subset selection on classification for biomedical datasets with a less samples and large features or variables. Commonly, the performance of a classifier is degraded due to irrelevant features of high dimensional data. A conventional form of regularization gives majority class an equivalent or more emphasis, but here main focus is on Minority class so that overall Classifier's performance can be improved. Key words: Feature Subset Selection, Linear Discriminant Analysis, High Dimensional Small Sized data.

## AVR Based Portable Writing Board using Matlab

Palash Pattewar, Shubham Hedau, Tejas Varkhede & Dr. M. P. Satone

(Presented paper in International Journal of Engineering Trends and Technology in January 2016)

**Abstract:** The main objective of this project is to increase the mobility of the person who uses the traditional writing board for various purposes such as teaching. This project will enable a person to write on white board from distance by using portable wireless device. The Hand Held device consists of a GLCD, touchpad, micro controller, wireless transmitter and battery. Thus whatever the user writes on the wireless device, will be displayed on the board. This enables the

user to move around freely within a certain distance and still write on the board.

**Index Terms:** AVR, GLCD, Touch Screen, Matlab, cc2500

# Waveform Envelope Method to Detect Point on Wave Initiation of Voltage Sag

Prof. Nayana Nitin Jangle

(Published paper in International Journal of Science Technology & Engineering, IJSTEV2217068, ISSN (online):2347-784X, January 2016, Impact factor: 2.85)

Abstract: This paper presents an algorithm for detection and characterization of voltage sag on transmission and distribution lines using Waveform envelope Method. Voltage sag magnitude and duration are two commonly used characteristics of voltage sag. These two characteristics can be obtained by using RMS voltage method. But the other characteristics of voltage sag like point on wave and phase angle jump are not clear from RMS voltage calculation as it uses one or half wave window. In this paper RMS voltage method and discrete wavelet transform method is used to calculate voltage sag magnitude of voltage sag disturbance from fundamental 50 Hz frequency. Point on wave initiation is a characteristic that can not be identified from RMS waveform. So, to detect Point on wave initiation sinusoidal voltage equation is used with discrete wavelet transform. As alternating waveform is not always ideal but it is disturbed due to different load conditions on system, Waveform envelope algorithm is simulated to detect point on wave initiation in MATALAB simulink and the results are presented at various magnitudes and Point on Wave initiations.

**Keywords:** Power Quality, Point on Wave Initiation, Voltage Sag, Discrete Wavelet Transform, Waveform Envelope



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