■ Three days' workshop on "Problem solving using C and C++"

Three days' workshop on "Problem solving using C and C++"

Three days' workshop on "Problem solving using C and C++" for SE A and B students were conducted from 26th Dec. 2017 to 28th Dec. 2017. Following is the day wise schedule for the workshop.

Faculty (Day 1) : Prof. S. K. Gondhalekar ,Prof. C. R Patil and Mr. Yogesh Nawale

Faculty (Day 2) : Prof. P. P. Vaidya, Prof. S. M. Malao and Mr. Yogesh Nawale

Faculty (Day 2) : Prof. I Priyadrshani, Prof. L. A. Patil and Mr. Yogesh Nawale

The main aim of the workshop was to encourage students to solve real life problems using C/C++ programming language. Real life problem statements were given students on data structures and computer graphics. All three days students implemented programs either in group or individually in Object Oriented Programming. All the students enjoyed the sessions. **Outcome:** students motivated to develop real life problem solving skill using C / C++ Programming.

■ A pitch presented for 'Sandbox Samvidha by Deshpande Foundation Initiative' at DISQ, Indiranagar by Mr.Kushal Birla on date: 2/12/2017.

During the session more than 15 pitches were presented from different participants across India seeking funding opportunity for their respective ideas.

■ An industrial visit to SEO Discovery, Chandigarh on 19th December 2017

An industrial visit was organized for BE students to SEO Discovery, Chandigarh on 19th December 2017. 41 BE students along with staff members Prof. Lalit Patil & Prof. Jyoti Thakur visited the industry. Content head manager, Miss. Despina Singh gave information about Digital Marketing. She also explained different sectors like SEO content management, web designing, Business analytics and designs. Also the work culture of their company was explained in brief.

Visit Outcome: The students got aware about the digital marketing concept and importance of engineering towards the upcoming technology.

■ An industrial visit to Sebiz Square, Chandigarh on 19th December 2017

An industrial visit was organized for BE students to Sebiz, Chandigarh , on 19th December 2017. 41 BE students along with staff members Prof. Lalit Patil & Prof. Jyoti Thakur visited the industry.HR Mr. Govind Saniya gave introduction about the company.He showed some glimpse of government programs carried out by Netsmartz. He also told us about Saacc startups in box incubators, Bootcamps. They provide industrial training for 6 months for B.Tech students. One of their motive is GPW(Great Place to Work). Java Developer and Content Manager Mr. Gaurav Sharma explained about new trend in technology. He also explained different scope of technology.

Visit Outcome: The students got aware about the new trending technology and application of those.

■ A seminar on "Gender and Society" by Dr. Vaishali Balajiwale on 22nd Jan 18

The objective of the seminar is to emphasize on the need to sensitize gender discrimination and ensure equality.
Dr. S. M. Kamalapur, S. M. Malao, P. P. Vaidya, J. R. Mankar, R. A. Palde and J. N. Thakur along with 94 students of SE & TE attended the seminar. Topics like gender discrimination, vulnerability, effect of inequality on quality of life, status of Indian women, and adverse impact of gender inequality, ways to rectify inequality, eve teasing and causes were discussed by Dr. Vaishali Balajiwale

■ Expert Talk on "are you safe online"
Mr. Mayur Patil, Director of Emsys solutions Pvt. Ltd. and privacy security task force member at Mozilla, delivered the expert talk on "Are you safe online?" for FE Computer students.
The aim of talk was to make students aware about how to be safe online using browser add-ons and tools. The session emphasizes the importance of privacy and security. Mr. Ankit Kumar Singh told students about open source and Mozilla campus club. It was organized by Prof. G. R. Gupta, Prof. M. V. Rajput & Prof. D. M. Kanade on 24/01/2018 at 2:30pm to 4.00 pm.

Expert talk on "Are you safe online?" by Mr. Mayur Patil and Mr. Ankit kumar Singh

■ Session for housewives on "How to use Smartphone and its applications?"

Session for housewives on "How to use Smartphone and its applications?" was arranged by Prof. Monali P. Mahajan and Prof. Namrata M. Pagare , Computer Engineering Department on 25th Jan 2018. In this session initially trainers demonstrated use of Smartphone followed by features of Smartphone. After this, queries on Smartphone were resolved by trainers. Total 20 housewives attended the session. All participants enjoyed session thoroughly.

■ Session for senior citizens on "Use of smart phone and e-payment"
CSI student Branch in association with Dept. of Computer Engineering conducted a session for senior citizens on "Use of smart phone and e-payment". This activity was coordinated by Prof. A.V. Tavare and Prof. S. T. Patil under the guidance of Prof. Dr. S. S. Sane (RVP VI CSI Maharashtra & Goa).
Student volunteers Mr. Devashish Katoriya and Ms.

Anuja Dixit explained about benefits of e-payment and they also demonstrated various ways of e-payments through smart phones. Various queries from senior citizens had been resolved during the session.

Session for senior citizens on "Use of smart phone and e-payment"

■ K. K. Wagh received Prestigious awards by Computer Society of India (CSI)

K. K. Wagh institute of Engineering Education and Research Nashik student branch is honored by various awards during 52nd Annual Convention of Computer Society of India (CSI 2017), held at Science City, Kolkata during 19th January to 21st January 2018. The Theme of CSI Annual Convention 2017 was "Social Transformation – Digital way".

- Prof. Anand Kolapkar, Comp. Dept. was awarded by "Longest Continuous Student Branch Counselor" at 52nd Annual Convention of Computer Society of India (CSI 2017), held at Science City, Kolkata during 19th to 21st Jan 18

- Student Coordinator, Mr. Vishal Pattar was honored as 'Highest Committed Student Branch Activist' at 52nd Annual Convention of Computer Society of India (CSI 2017), held at Science City, Kolkata during 19th to 21st Jan 18

■ Expert Lecture on "Emerging Trends in Embedded System and Internet of Things"

A session on "Emerging Trends in Embedded System and Internet of Things" by Dr. R. S. Tiwari, Director of Cognifront Academy, Nashik was organized for Third year Computer Engineering students on 05-02-18. During the session Dr. R. S. Tiwari, talked about application of IoT in various domain. Then he discussed about various issues and challenges in the field of IoT. Students have been motivated to observe and identify various real life problems for which they could provide solution through IoT technologies. 56 students of Third Year Computer Engineering along with staff members were present for the session. The session was coordinated by Prof. I Priyadarshini and Prof. Lalit Patil.

■ Session on "Education Opportunities Abroad"

A session on "Education Opportunities Abroad" by Mr. Hiren Panjwani, training faculty of Akshay Study Abroad Consultants, Nashik was organized for Final year Computer Engineering students on 22-02-18. During the session Mr. Hiren talked

about various educational opportunities available to the students in the USA, the UK, Australia, Canada, Singapore, New Zealand, Germany etc. We will also inform them about various entrance exams viz. GRE, GMAT, SAT, TOEFL , PTE and IELTS and the application process to foreign Universities and procedure for Visa documentation.

- Mahima Gaikwad, Durgesh Pachghare, Atharva Patil of SE Computer participated in Tata Crucible Hackathon and selected among Top 9 teams from entire West Zone for final round. Same team also received first prize in Karmveer Expo 2018 worh Rs. 15,000/-

■ **Expert talk on the topic "Android Application Development Using Android Studio"**

An expert talk on the topic "Android Application Development Using Android Studio" was conducted on 1st March 2018 at department of Computer Engineering. The motive of the event was to introduce students about Android Studio installation, configuration and use for developing android applications for mobile devices and uploading apk in google play store.   Students of FE-Mechanical (Second shift), FE-Electrical (Second Shift) attended the same. The session was conducted by Mr. Mahesh Gawale, Application Developer, Infinity IT, Nashik. The talk was coordinated by   Prof. N. S. Sonawane under the guidance of Prof. Dr. S. S. Sane, Head of Department.

■ **An Expert Talk on " CRM &it's Application"**

An Expert Talk on CRM & it's Application conducted by Mr. Arun Sharma , Directore, CRM application, NTT Data, America on 29th March 2018. The session begun with the felicitation of Mr. Arun Sharma and the brief introduction of him. The event was organized by Mrs. A.V Tavare and 40 students were attended the talk. Mr. Arun Sharma explained about CRM (Customer Relationship Management) ,CRM products, his current project's case study and CRM in Business Intelligence.

■ **Two days State Level Workshop on "Internet of Things" under the Cognifront Center of Excellence**

The Department of Computer Engineering and Cognifront, Nashik organized a Two days State Level Workshop on "Internet of Things" on 24th and 25th March 2018. The workshop was organized by Prof. S. T. Patil and Prof M .P. Mahajan under the Cognifront Center of Excellence . 97 students of SE Computer Engineering attended the workshop. Workshop was conducted by Cognifront Team members. This workshop aims students to get familiar with various sensors along with arduino board. It has covered hands-on session on seven mini projects. Workshop has provided internship opportunity for the enroll students at Cognifront after written and oral test.

From left Mr. Hasit Kaji, Mr. Sumit Thorat, Prof. Pingle, Prof. Dr. Kamalapur, Mr. Rishabh Ramdiya, Prof. Dr. S. S. Sane, Prof. Shahane, Prof. Kolapkar and Ms. Anuja Dixit

The Department of Computer Engineering organized Equinox 2018, a National Level Symposium under Debugger's Club and Computer Society (CSI) Student Branch on 21st and 22nd March 2108. The event was inaugurated on 21st March 2018. Mr Hasit Kaji , TCS , DISQ, Nashik was the chief guest for the event. The chief guest Mr. Hasit Kaji inspired the students through his experience. Various events such as Workshop on A.I on P.I, Hunger Games, White Collar, Ink Sync, Muggle Quidditch were conducted on Day 1. Day 2 having some exciting events like Source Code, Inquizitive, Shutterbug and Stock Minder. This National level Event received large number of participants of more than 500 students from various colleges. Many events were judged by esteemed judges from various fields. Students participating in the event won various exciting prizes. Prof. W. W. Pingle coordinated the event. Further "White-Spot-screening ideas" club was inaugurated by Mr. Hasit Kaji and "KKWIEER-Redx" an innovation Club was inaugurated by Rishabh Rambhia.

■ An industry visit of SE students to NEC Nashik

Total 32 SE students along with Prof. M. P. Mahajan, Prof. N. M. Pagare visited NEC (Nashik Engineering Cluster) on 16th March 2018. Initially a brief about NEC and its services was presented through video. Later students visited different sections of NEC Rapid Prototyping Center, CNC Machine Center, and testing lab. Ms. Divya explained about various skill development courses offered by NEC, its duration and opportunities for students.

■ An industry visit of TE students to PSPL , Pune

29 TE students along with staff members Prof. L. A. Patil, Prof. I. Priyadarshini and Prof. N. G. Sharma visited to Persistent Systems, Hinjewadi, Pune on 16th March 2018. HR Mr. Atul Shenoy gave introduction about the company. He demonstrated two live projects on block chain and machine learning. He also told us about the companies' recruitment process in detail. Then, students interacted with persistent employees who were alumina of KKWIEER and PICT, Pune. He also explained different skill required for recruitment like communication, technical and logical etc.Visit Outcome: The students got aware about the skill requirements for persistent and their recruitment process.

■ Students participation in Nashik Innovation Fest 2018

■ Week 2 activity of REDX club

REDX club conducted its week 2 activity. 7 Participants with 4 REDX team members were present for the task. Spot probe session started with Video from Prof. Ramesh Raskar, followed by discussions about REDX Club facilities for participants, Participants were motivated by REDX Club activities. Further instructions about 10 week spot-probe sessions were discussed with participants.

■ Embedded System and IOT Mini Project Competition

A Mini Project competition on "Embedded System and Internet of Things" was organized by Department of Computer Engineering under Computer Society of India for Third year Computer Engineering students on 06-04-18. Prof. S. N. Chaudhari. Asst. Prof., Department of Information Technology and Prof. Nirmala Kumari Asst. Prof., Department of Electronics and Tele communication were invited as Judges. Total 9 groups has been selected for the competition and the groups demonstrated their projects to judges and the winners were awarded with cash prize. The event was coordinated by Prof. I Priyadarshini and Prof. Lalit Patil.

■ Advanced Data Structure and Computer Graphics Mini Project Competition

A Mini Project competition on Advanced Data Structure and Computer Graphics was organized by Department of Computer Engineering for Second Year Computer Engineering students on 07-04-18. Prof. Mayur Sonar Asst. Prof. KKWIEER Nasik was invited as Judge. Total 19 groups has been selected for the competition and the groups demonstrated their projects to judge. The event was coordinated by Prof. S.K. Gondhalekar and Prof. C.R. Patil.

■ Seminars/Workshop/Training attended by staff:

- Prof. V. N. Suryawanshi has attended FDP on Pattern Recognition and Image analysis by IIT Roorkee from 15/12/2017 to 19/12/2017.
- Prof. C. R. Patil has attended Poster presentationn at 2nd national research symposium on computing from 15/12/2017 to 16/12/2017.
- Prof. M. J. Patil attended 6 Days STTP on" System Programming and Advances in Compiler Construction" form 11/12/17 to 16/12/17.
- Prof. S. K. Chumble attended Internet Of Things: Architecture, Challenges, Applications And Tools for Smart Cities from 12/12/2017 to 13/12/2017.
- Prof. L. A. Patil attended Internet of things using Raspberry pi from 14/12/17 to 16/12/17.
- Prof. S. K. Gondhalekar attended FDP on "Fuzzy logic and its applications" from 11/12/17 to 15/12/17.
- Prof. M. J. Patil attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. N. M. Pagare attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.

- Prof. S. D. Jadhav attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. G. R. Gupta attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. M. N. Shinde attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. S. P. Solunke attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. M. V. Rajput attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. P. M. Bhadane attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. S. A. Gade attended FDP on "Foundation Program in ICT for Education" from 03/08/17 to 07/09/17.
- Prof. A. V. Taware attended FDP on Big Data Science in NDMVP's KBTCOE, Nashik from 11/12/17 to 15/12/17.
- Prof. Nilesh S. Sonawane attended Advanced Tools and Technologies using Android Mobile Applications , Department of Computer and E&TC engineering, at JSPM's BSIOTR, Wagholi, Pune from 12th January 2018.
- Prof. Namrata M. Pagare, Prof. Shweta D. Jadhav and Prof. Geeta R. Gupta attended FDP on Pedogogy for online and blended teaching learning process from 14th September 2017 to 12th October 2017.
- Prof. Prof. I. Priyadarshini attended Two days state level workshop on Recent advances in IoT from 9/2/18 to 10/2/18.
- Prof. Dr. S. M. Kamalapur, Prof. P.P. Vaidya, Prof. D. M. Kanade attended Faculty Development Programme by Nalanda Business Associates from 9/2/18 to 10/2/18.
- Prof. A. V. Kolapkar attended International FDP on "Data Science and Machine Intelligence" , PCCOE, Pune from 15/2/18 to 16/2/18.
- Prof. M. P. Mahajan , Prof. S. M. Malao , Prof. J. R. Mankar, Mr. P. D. Surwade attended Training session on Matlab and Simulink from 20/2/18.

- Prof. N. M. Pagare attended Two days state level workshop on Digital Communications- Challenges and Opportunities , KKWIEER , Nashik from 23/2/18 to 24/2/18.
- Prof. R. H. Jadhav attended Two days state level workshop on Security in Embedded System and IoT , NDMVP Nashik from 27/2/18 to 28/2/18.
- Prof. M. P. Mahajan attended Two days state level workshop on Security in Embedded System and IoT , NDMVP Nashik from 27/2/18 to 28/2/18.
- Prof. N. G. Sharma attended Two days State level workshop on IoT scope and Applications, KKWIEER Nashik from 26/2/18 to 27/2/18.
- Prof. Dr. S. S. Sane as a session chair at cPGCON-18 , Sinhgad Institute of Technology , Lonawala from 5/4/18 to 6/4/18.
- Prof. N. S. Sonawane attended Skill Development Program on Consultant Network Security under RUSA from 9/4/18 to 14/4/18.

■ **Papers Presented by Staff and Student**

Title of Paper: Autonomic and Energy-aware Resource Allocation for Efficient Management of Cloud Data Centre

Author: Madhukar Shelar, Shirish Sane, Vilas Kharat, Rushikesh Jadhav

Organizer : International Conference on Innovations in Power and Advanced Computing Technologies [i-PACT2017]

Abstract: Server Virtualization is the key technology used in cloud data centers. In this technique, number of Virtual Machines (VM) can simultaneously run on the top of a single Physical Machine (PM) or host server. Each VM hosts guest operating system, middleware software and applications. There are various dimensions of resources available in PM such as CPU cores, memory, network bandwidth and storage space. As per the requirement of applications deployed, VM allocates resources from pool of resources available in a PM or host server. The placement of VMs into appropriate PM and as the need arises migrate them among other PMs by achieving application performance and saving energy are the key issues of this research paper. The performance of applications is improved by reducing frequency of live VM migrations among PMs and energy is saved by minimizing number of active servers in a data centre. The proposed approach presents algorithm for resource allocation in cloud data centre by considering various factors such as

major resource requirement during initial setup of virtual machines, dynamic resource allocation at peak load on applications, performance of applications and power saving in a data centre. A data centre is simulated with heterogeneous servers by assigning load of randomly virtual machines containing CPU as well as memory intensive applications. The power consumption and VM placement failure rate are considered as parameters for analyzing the proposed algorithm. The experimental results of proposed algorithm for initial placement of VMs are compared with various algorithms such as first fit, best fit and random selection of PMs. In addition to the initial placement of VM in appropriate PM, the research issue of dynamic resource management in a data centre is also addressed.