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opc@de

inline with trends

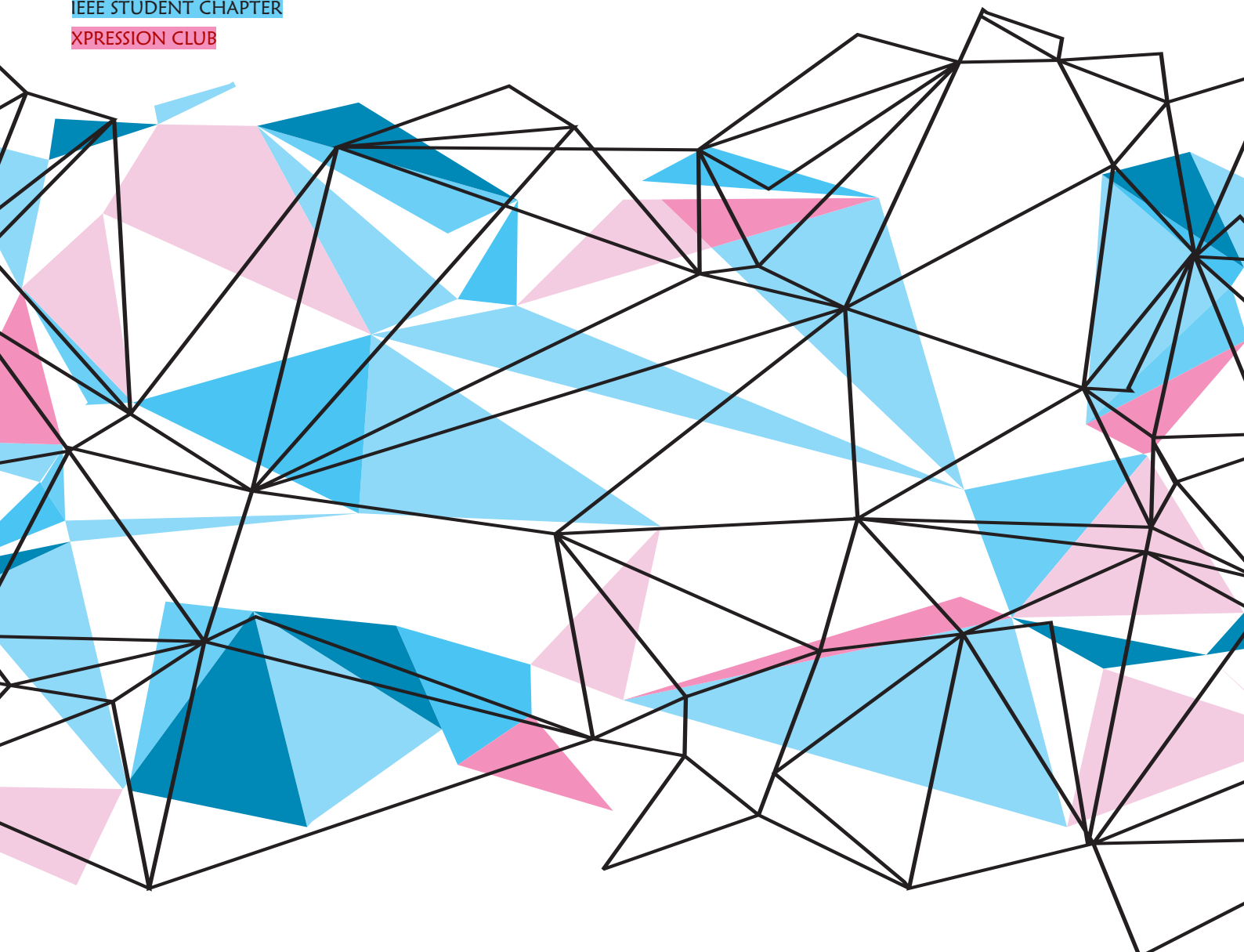
ICASTE - IC2TA

DEATHON

CMSA

IEEE STUDENT CHAPTER

XPRESSION CLUB



DEPARTMENT OF COMPUTER ENGINEERING



Parshvanath Charitable Trust's

A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE

(Affiliated to Mumbai University, Approved by AICTE, DTE and Govt of Maharashtra)

Attendance Rewards

Aptitude Training

PBL

Ojus

Foreign Language Courses

App Development Club

Exalt

Xpression Club

Moodle

GATE/GRE*/CAT*

NPTEL



From the Principal's Desk

Computing software and systems are becoming increasingly integral to our lives, revolutionizing virtually everything from the way we live, work and communicate. Computer Engineering is one of the most flourishing disciplines in recent times and is now also a key enabler for discovery and innovation in most other fields, making it an incredibly relevant course of study. With increased demand among recruiters, this domain has become the preferred line of study among students as well.

I whole heartedly welcome and congratulate you for choosing Computer Engineering Department in A.P. Shah Institute of Technology for continuing your educational journey. The department was launched keeping in view the dynamic nature of the IT industry and the ever increasing demand for quality and well-trained IT professionals. Right from its inception in 2014, the department has been offering excellent infrastructural facilities with a variety of computing platforms to motivate students to meet the burgeoning demands of IT industry.

The teaching processes are executed by highly qualified and experienced teachers who make good use of smart classroom facilities and Moodle software, thereby ensuring deep understanding of concepts through demonstrations and hands-on practice sessions executed under their keen supervision. Highly calm and supportive environment of institution develops a spirit of belongingness among staff and students resulting in a small community full of innovative ideas. I am very happy that the Department of Computer Engineering have compiled a newsletter. This is another platform for them to express and share their innovative ideas. Let us stride ahead as a family.

Dr. Uttam D Kolekar
PhD (Electronics and Telecommunication Engineering)



PREFACE

Dear Readers,

It is a matter of pride as well as pleasure to present before our readers the second volume of Computer Engineering Department's Newsletter. The name "Opcode", very aptly sums up the vision of our Department. Opcode when decoded mirrors the success story of our Department. It reflects upon the commendable contribution made by all members of COMPUTER family in their fields of expertise as well as for the overall growth of the college. Opcode resembles the in house media echoing departmental activities. It will be circulated among all faculty members and students. Thereby Opcode will ignite and keep us powered to attain our vision.

Events in Opcode is a look back through all the activities of the Department in the academic year 2018-2019. In this period, we have inaugurated the IEEE students chapter and organized a number of seminars and training programmes for our students. The department has also selected members for the departmental council, which goes by the name Computer Engineering Students Association (CMSA). Performance highlights our results which is constantly on the upward trajectory as well as the top-notch rankers in University and other competitive examinations. Achievements reflect upon the persistent and committed efforts made by faculty and students in taking the Department one step ahead. Students have proved their mettle by actively participating and winning prizes in technical, extra-curricular and sports activities. Faculty have also made quality publications in this period. Through Innovation, Opcode also provides a platform for our faculty and students to share their ideas and knowledge.

I would like to extend my sincere gratitude to our Chairman Mr. Chirag Shah, Trustee Mrs. Pooja Shah, other members of the Management, Principal Dr. Uttam Kolekar, Dean Academics Prof. Atul Deshpande, Dean Administration Dr. Sameer Naniwadekar for their ongoing support in all endeavours. I would like to congratulate and thank my faculty team for their every bit of service for the department and do expect the same in times to come. Congratulations to the members of editorial board and the students who combinedly helped in materializing this issue of 'Opcode'.

Prof. Sachin H Malave
Head of the Department

The Opcode Team

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Prof. Sachin H Malave

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INNOVATIONS



DEPARTMENTAL EVENTS

A look back at a few of the events and moments that marked the past year at our department...

While the classroom excels at producing the technical prowess demanded by the engineering profession, it falls short in quenching the students' thirst for industry exposure. Students are always looking for an interactive learning experience that moves them out of the textbook and into the real world. Speaking events encourage this by bringing students face-to-face with practicing actuaries where they can learn first-hand the expectations firms have of their employees.

2018 has been an eventful year. The department has been committed to emerging practices and knowledge production. This year we convened numerous seminars, workshop and industrial visit with the aim of bridging the gap between classroom and industry and keeping our students **Inline with the trends**

Vision

To become nationally reputed department producing universally competent engineers, to benefit sustained growth of an individual and the society at large.

Mission

1. To provide learning ambience for students and faculties through infrastructure, expertise and training.
2. To develop technically competent professionals with strong foundations, capable of adapting with the changing technologies for developing world class softwares.
3. To inculcate professional, social and ethical values in students by providing opportunities to solve environmental and social problems.

IC2TA-2019



“International Conference on Innovations in Computer Technology and Applications” (IC2TA) was inaugurated by the Department of Computer engineering of A. P. Shah Institute of Technology, Thane under the umbrella of Prism of Conferences international Conference on Advances in Science, Technology and Engineering (ICASTe-2019) on 4th and 5th January 2019. The conference featured few original research papers on the theory, design and implementation of computing technologies. The tracks included cloud computing, AI machine learning, computer security, image processing and computer vision, software engineering, algorithm and optimization, parallel and distributed computing .

ICASTe 2018 was organized on April 20 and 21st 2018. ICASTe provided a forum for students, faculty, industry and researchers to share their research ideas.

INAUGURATION OF IEEE STUDENT CHAPTER

A notable event in the period was the inauguration of “IEEE APSIT Student Branch”. The inaugural event took place on 22nd January 2019, by Dr.Hussain Mahdi, Professor, Department of Electronic and Computer Engineering, University of Limerick (UL), Ireland who is

also a professional speaker and motivator from the Technical society of IEEE. Piyush Sawarkar from SE Computer ,Nirish Samant and Mrunal Jadhav from TE Computer were granted membership of the IEEE student chapter.



SMART CITY IDEATHON

Smart City Ideathon was a national level competition held at "A P SHAH INSTITUTE OF TECHNOLOGY", Thane with the vision to help students explore their creative minds focusing on real time problems. This event was presented by Lakshya and was held on 29th March 2019, in association with Directorate of Technical Education, Indian Society for Technical Education,

Thane Smart City, CII Education Excellence Forum and Enroot Mumbai. The initiative not only helped the students learn the skills of working as a team and presenting themselves but also gave them the opportunity to showcase what a "smart city" really meant to them.



HACKSCRIPT 1.0

Department of Computer Engineering and Information Technology organized the first intercollegiate Hackfest named Hackscript 1.0 on 16th and 17th March 2019. This event was open for all Technical Institutes of Mumbai University. 30 + aspiring teams from different institutes participated in this event. Brainstorming problem statement was given by ASHNIK Technology

Solutions, Mumbai. Team from APSIT grabbed the First prize and Second Prize was shared between Team of KJ Somayya, Mumbai and the Team of Atharva College of Engineering, Mumbai.



INDUSTRIAL VISIT @ TECH MAHINDRA, MUMBAI

APSIT's Department of Computer Engineering and Information Technology organized an Industrial Visit to Tech Mahindra, Mumbai on 4th April 2019 in collaboration with CSI. Collectively 50 students from both the departments visited the industry accompanied by Prof. Poonam Dhavale and Prof. Pravin Adivarekar. Tech Mahindra representatives briefed about their organization and also about the mission of forming the Makers Lab at Tech Mahindra. The Makers Lab was formed to focus on the branches of AI and thereby build next level of AIs. Apart from that research is being carried out on other domains like Machine Learning,

Block Chain, IOT, Robots, Quantum Computing and many other frameworks. Students visited different sections of Tech Mahindra and interacted with the development team. The team explained various activities that take place in their organization and the benefit gained through them by the team as well as the individuals. Through this Industrial Visit students were made aware about how things actually work at professional level, the lightning fast advances happening every single second and how student should prepare themselves for the challenges being faced by IT industry.



INDUSTRIAL VISIT @ ASHNIK, MUMBAI

To keep the students aware about the trending evolutions in open source technologies Department of Computer Engineering and Information Technology arranged an industrial visit to Ashnik Technologies Pvt. Ltd., Mumbai as a part of Open Source Experimental Lab initiative on March 23rd 2019. Around 18 students from both the departments participated in this technical visit in presence of Prof. Kiran Deshpande, HOD IT. Ashnik is a leading enterprise open source solutions and

consulting company in Southeast Asia and India. Mr. Sandeep Khuperkar, CTO and Director of Ashnik enlightened the students about various open source technology developments. Mr. Sandeep shared his versatile experience of working with Redhat and Linux and briefed about enterprise designing using open source technologies such as NGINX, Docker, Kafka, ElasticStack, PostgreSQL, MongoDB, Pentaho, Couchbase etc.



TECHNO SESSION ON DOCKERS



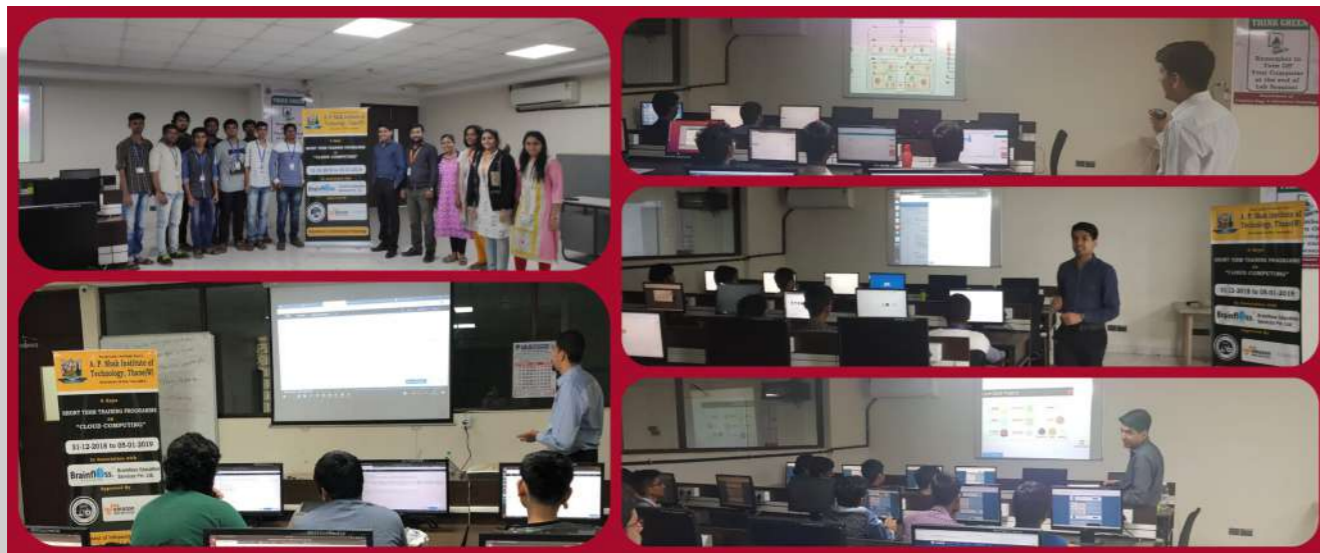
Department of Computer Engineering and Information Technology organized a technical session on Docker at Open Source Experimental Lab in Collaboration with Ashnik Technology Solutions, Singapore for APSIT Core Open Source Team on 30th March 2019. Mr. Jagganath Nikam, DevOps Architect from SIGMOID had

introduced students to basic deployment and use of Docker. Students were given few mile stones which they are supposed to achieve before next session which would be monitored and reviewed by a team of professors at APSIT.

SHORT TERM TRAINING PROGRAM ON CLOUD COMPUTING

Department of Computer Engineering and Information Technology conducted ISTE approved STTP on "Cloud Computing" from 31st December to 5th January 2019. The objective of this program was to introduce the participants with an insight of Cloud Computing along with its applications. Cloud Computing is expanding rapidly with ever-new developments and applications. This STTP has provided a platform for students and faculties to explore their knowledge in the field of recent cloud computing trends like Open Stack, Cloud Cluster

and AWS. This intensive workshop was conducted by domain experts from Capgemini and Brainfloss. Mr. Rohan Shah Cloud Architect from Capgemini and Mr. Pranav Phadke AWS cloud Architect from Brainfloss Solutions were the resource persons. Total 50 participants have attended this training program.



SHORT TERM TRAINING PROGRAM ON MACHINE LEARNING

Department of Computer Engineering and Information Technology conducted ISTE approved STTP on "Machine Learning: Recent Trend in Computer Engineering" from 31st December to 5th January 2019. The objective of this program was to introduce the participants with an insight of Machine Learning and its applications. Machine Learning is expanding rapidly with ever-new developments and applications. This STTP has provided a platform for students and faculties

to explore their knowledge in the field of recent trends in Machine Learning. This intensive workshop was conducted by Mr. Shaikh Ali Mustafa from Google Crowd Source Global. Total 68 participants have attended this training program. This STTP was conducted as a part of leading India AI: A National Initiative on AI Skill and Research in association with BENNETT University.



SHORT TERM TRAINING PROGRAM ON BUILDING REAL WORLD NATIVE CROSS-PLATFORM APPLICATIONS USING XAMARIN



Department of Computer Engineering and Information Technology conducted STTP on Building Real World Native Cross-platform Applications using Xamarin from 18th June 2018 to 22nd June 2018. STTP was aimed at providing students knowledge of the fundamentals of Xamarin Forms, its architecture and build real world

native application for Android, iOS and windows phone. During this STTP BE students enabled themselves for using Xamarin Forms API to build native mobile applications for iOS, Android and Windows completely in C#. Mr. Vinayak Narkar, Technical specialist @ ISG eSolutions Pvt. Ltd. was the resource person.

SHORT TERM TRAINING PROGRAM ON CORE AND ADVANCED JAVA

APSIT's Department of Computer Engineering and Information Technology conducted Short Term Training Program on Core and Advanced Java on in Collaboration with APTECH Ltd from 18th June 2018 to 23rd June 2018. Mr.Ashish Khot from APTECH Pvt.Ltd. conducted the training program. This STTP had enhanced and provided platform for refreshing the basics and advanced features of Java Technologies, with hands on training to faculty members and students for developing software of their concern using Java Technologies.



SHORT TERM TRAINING PROGRAM ON RED HAT ADMINISTRATION

Department of Computer Engineering and Information Technology conducted Short Term Training Program on Core RED HAT System administration under RED HAT Academy Program from 18th June 2018 to 22nd June 2018. This STTP provided students and faculties with Linux administration "survival skills" by focusing on core administration tasks. Contents covered in this STTP also provided a foundation for students planning to enable themselves in Linux system administration by

introducing key command-line concepts and enterprise-level tools. STTP further went deeper into core Linux system administration skills, including storage configuration, security feature management, task control, and installation and deployment of Red Hat® Enterprise Linux.



EXPERT TALK : FIRST STEP INTO ENTERPRISE WORLD

To create awareness amongst students about the latest trends and technologies and its usefulness, Department of Computer Engineering and Information Technology organized an expert talk ,” First step in Enterprise World ” on 12th March 2019. Mr. Sandeep Khuperkar, the CTO, Director at Ashnik was the guest of honour. The talk aimed to provide knowledge and information to students regarding upcoming and trending technologies, its importance and applications. The speaker, Mr. Sandeep Khuperkar, was informative about how the technological advancements play a vital role in

overall development. He motivated students to stay updated with recent advancements and to look forward for careers in various developing open source technologies. Mr. Khuperkar, with narration of few market trending examples highlighted how students can successfully build and opt of job opportunities in open source platforms. Mr. Khuperkar conducted an interactive activity which involved participation of students in groups, to share their knowledge and ideas about the latest technical developments known to them.



SHORT TERM TRAINING PROGRAM ON ELASTIC FRAMEWORK



Team Ashnik and APSIT's Department of Computer Engineering and Information Technology organized STTP on Elastic Framework at Open Source Experimental Lab for Emerging Technologies built in collaboration with Ashnik from 28th June 2018 to 30 th June 2018. 30 bright minds from the IT and Computer Department attended the workshop. Mr. Ajit Ghadge, Senior Consultant and SME in Elastic Stack was the resource person.

PROJECT BASED LEARNING - PYTHON

An exclusive training on Programming Basics (Python) under PBL for SE students was conducted from 24th December 2018 to 29th December 2018. Mr. Rohit Kumar, Aedifico Tech Pvt Ltd, Delhi was invited as resource person from industry.The expert covered all the topics under python programming and assigned different projects for various groups of students. Online test was also conducted based on the topics covered in the training and prizes were given to top 3 scorers.



XPRESSION CLUB



Xpression club is an initiative by APSIT to create a supportive learning environment for every student who wishes or needs to improve their communication skill and confidence which will be helpful for them in their career and personal life.

The Xpression club was inaugurated on 29th January 2019 and many events were held associated with it

throughout the months there after. Students from the department have been keen and have actively participated in many of the Xpression Club activities. The participants were exposed to challenging activities like debates, group discussions, Ted talks etc.

PLACEMENT DRIVES

The progress of our recruitment process can be judged by the increasing total number of offers made every year. Many reputed IT giants and corporate companies have visited the campus in this academic year. Our students have lived up to the expectations of the visiting organizations and have been recruited with enviable offers.



CAPGEMINI AT APSIT



HEADSTRAIT RECRUITMENT IN PROGRESS



WIPRO AT THE CAMPUS



VISIT BY ESCAN



LTI AT APSIT



CAPGEMINI AT APSIT



ASPIRANTS DURING HEADSTRAIT VISIT

DEPARTMENTAL SOCIETIES/STUDENT CHAPTERS

Lead, Serve and Inspire @ APSIT

Involvement in student associations and chapters causes student leadership development. It creates a sense of responsibility, independence, satisfaction and more positive attitude to life.

Computer Engineering Students Association

CMSA is an integral part of the educational mission of the college. As the center of the college community life, CMSA complements the academic experience through an extensive variety of cultural, educational, social, and recreational programs. These programs provide the opportunity to balance course work and free time as cooperative factors in education

President : Mr. Aditya Joshi

The President shall have the general responsibility for coordinating the activities of CMSA and for directing and overseeing the publicizing of the affairs of the Student Body. He shall preside at all Student Council meetings.



Vice President : Mr. Anmol Majithia

The Vice-President shall share the duties and responsibilities of the President.



Secretary : Mr. Ashwin Shenolikar

The Secretary shall be responsible for recording the minutes and acting as official timekeeper of all CMSA meetings. The Secretary shall maintain the permanent records of the Student Council and he/she will assist the President and Vice-President. She shall preside at Student Council meetings in the absence of the President and Vice-President.



Treasurer : Ms. Sanika Chavan

The Treasurer shall be the custodian of the Student Association's funds. She shall keep all financial records, disburse funds, and present monthly and annual accounts of financial status of the Student Association .



C
M
S
A

The department congratulates the members of CMSA 2018-19 , President Aditya Joshi, Vice President Mr. Anmol Majithia, Secretary Mr. Ashwin Shenolikar, Treasurer Miss. Sanika Chavan for their efforts.

PERFORMANCE

ACADEMIC PERFORMANCE

When it comes to displaying results the students perform exceptionally well.

As evident our results are constantly on the upward trajectory. We are very proud of the achievements of our pupils. This has been possible because of the smart teaching methodologies and the time intensive planning and effort put in by our students and faculties

Students who secured above 9 pointer in the Semester III, Semester V and Semester VII examinations held in November 2018.

SE

RANK	NAME OF STUDENT	CREDIT
1	Patil Apurva	10
1	Sabale Chirag	10
1	Samant Gaurav	10
1	Savarkar Piyush	10
1	Shelke Asmita	10
1	Shrivastav Ankit	10
2	Daradla Anjani	9.62
2	Jain Ujjwal	9.62
3	Savarkar Anooj	9.54

6 WITH PERFECT 10!
6 students from SE computers secured perfect 10 pointer in Semester III

TE

RANK	NAME OF STUDENT	CREDIT
1	Jadhav Mrunal	10
1	Samant Nirish	10
2	Shah Tina	9.85
3	Shah Kshitija	9.26

BE

RANK	NAME OF STUDENT	CREDIT
1	Dangethi Poojitha	9.6
2	Dalvi Siddhesh	9.52
3	Mishra Shubham	9.44

RESULT ANALYSIS

ACADEMIC YEAR	% OF STUDENTS PROMOTED FROM			
	FE	SE	TE	BE
2014-15	87.72			
2015-16	81.67	85.33		
2016-17	88.89	97.33	90.63	100

PLACEMENT DETAILS

ORGANIZATION	NAME OF STUDENTS	ORGANIZATION	NAME OF STUDENTS
TCS	Rahul Bhiwande	Hexaware	Advait Sathe
	Urvi Aryamane		Suman Shreyas
	Atharva Muley		Akash Jain
	Hemant Bhatt		Bhavna Gupta
Qspider	Ishika Mehta	A 1 Salasar	Ankita Gajaram
	Neelam Khasgiwala	ATOS intel	Swapnil Vernekar
	Vishal Chavan	NUCSOFT	Bhavana Gupta
LTI	Rahul Bhiwande	Harmon	Advait Sathe
	Jasmine Mehta	Paramatrix	Saurabh Yadav
	Anandita Chaudhari	Trigyn Technologies Ltd.	Siddhesh Dalvi
	Chinmay Gandhi	Credence Analytics(l) Pvt. Ltd.	Ketan Makwana
	Vinit Jain	Pixeltex solutions	Abhishek Dalvi
Capgemini	Swapnil Khirsagar	ValueFin	Gaurav Hulmukh
	Chinmay Gandhi	Occipital Tech	Vasan Naddoni
	Anamika Sonavane	Robokart	Akash Gada
Cognizant	Advait Sathe	Headstrait	Shivam Kolekar
	Poojitha Dangeti		Aditya Shetty

STUDENTS PURSUING HIGHER STUDIES

NAME OF THE STUDENT	NAME OF THE INSTITUTION
Kartik Kokane	Herbert Wertheim college of Engineering
Akshay Bhosale	University of Southern California
Pratik Jogdand	UNBC
Rohit Dhuri	Binghamton University
Sayali Patil	IFMR
Mohit Ghare	Vidyalankar School of Management
Sathyaveer Karmarkar	Illinois Institute of Technology

INTERNSHIP DETAILS OF STUDENTS

Company name and Place	Student Name	Duration
BPCL, Mumbai Refinery, Mahul	Manali Kajari	3 weeks
BPCL	Sailee Angane	3 weeks
Graphene Health Tech Pvt. Ltd.	Mugdha Asgekar	3 weeks
BWR, Lower Parel	Shivam Kolekar	8 weeks
L&T Limited	Anindita Chowdhury	4 weeks
Reliance Jio Infocomm Ltd.	Ahmed Raza Shaikh	4 weeks
Aufklaren Digital Media	Suman Shreyas	4 weeks
Aufklaren Digital Media	Swapnil Vernekar	4 weeks
Montran Corporation Pvt. Ltd.	Siddhant Bhadsavale	2 weeks

ACHIEVEMENTS

FACULTY ACHIEVEMENTS

We believe that the quality of our research is second to none!

Faculties play an important role in shaping the future and image of an institution. It is the effort of the faculty which makes an institution recognized with all his or her teaching excellence and research orientation. Our teachers are the pillars of strength. They have encouraged and helped students develop a well groomed personality. Our faculties are also actively involved in research and their highly cited papers are proof to this.

The Team from APSIT comprising of Prof.Sachin Malave(HOD-Computer), Prof.Kiran Deshpande (HOD-IT),Shubam Mishra (BE-Computer),Rikesh Kamra(BE-IT) designed and developed the DTE-Maharashtra NBA status portal.The software is an analyzing tool for DTE and Higher and Technical Education department to extract the current accreditation scenario of the technical institutes in the state. DTE can also gather information about the shortcomings which results in disqualification of the institutions and take appropriate actions. The software was inaugurated by Honorable minister for school, technical and higher education, Shri Vinod Tawde during the inaugural function of new HMCT building,Pune.

म. टा. विशेष प्रतिनिधी, मुंबई

राष्ट्रीय मूल्यांकन मंडळातर्फे देशभरातील शिक्षण संस्थांचे मूल्यांकन करून क्रमवारी जाहीर केली जाते. विविध निधी तसेच सरकारी योजनांचा लाभ आणि शिक्षण संस्थेला प्रतिष्ठा मिळवी या उद्देशाने या मूल्यांकनाला महत्त्व आहे. राज्यातील इंजिनीअरिंग, पॉलिटेक्निक, एमबीए तसेच फर्मसी कॉलेजांनीही हे मूल्यांकन घ्यावे या उद्देशाने तंत्रशिक्षण संचालनालयाने पुढाकार घेतला असून, यासाठी एक वेबपोर्टल सुरु केले आहे. विशेष म्हणजे हे पोर्टल इंजिनीअरिंगच्या विद्यार्थ्यांनीच तयार केले आहे.

इंजिनीअरिंगच्या विद्यार्थ्यांनीच बनवले वेबपोर्टल

तीन वर्षांमध्ये राज्य तंत्रशिक्षण संचालनालयाने तंत्रज्ञेही होण्याचा निर्णय घेतला आहे. यामुळे कॉलेजांचा तपशीलही एका क्लिकवर मिळावा या उद्देशाने एक पोर्टल विकसित कावे असे संचालनालयामधील दर्जासुधार समितीचे मत पडले. यानुसार समितीने राष्ट्रीय मूल्यांकन मंडळातील ए. पी. शाह इन्स्टिट्यूट ऑफ टेक्नॉलॉजीमधील विद्यार्थ्यांना यावर काम करण्यास सूचविले. यानुसार संस्थेतील प्राध्यापक सचिन मालवे, प्रा. किरण देशपांडे यांच्या मार्गदर्शनाखाली रिकेश कर्मा आणि शुभम मिश्रा या विद्यार्थ्यांनी nba.dtemaharashtra.gov.in हे वेबपोर्टल तयार केले. यामध्ये

इंजिनीअरिंग कॉलेजांचे मूल्यांकन होणार सुलभ



यापूर्वी कॉलेजांचा तपशील मिळवण्यासाठी संबंधित विभागीय कार्यालयाशी संपर्क साधावा लागत होतो. त्यात बराच वेळ जात असे. मात्र आता सर्व कॉलेजांनी माहिती भरल्यावर ती एका क्लिकवर उपलब्ध होणार आहे. यामुळे कोणत्या कॉलेजमध्ये काय त्रुटी आहेत हेसुद्धा समजू शकेल व त्याची पूर्तता करणे सोपे होईल. हे पोर्टल विद्यार्थ्यांनी तयार केल्यामुळे त्यासाठी कोणताही खर्च झाला नाही व विद्यार्थ्यांनाही अनुभव मिळाला.

- डॉ. अभय वाघ, संचालक-तंत्रशिक्षण संचालनालय

तंत्रशिक्षण संचालनालयाकडून या प्रकल्पावर काम करण्यास मिळाले. हा अनुभव विद्यार्थ्यांना खूप काही शिकवणारा होता. पुस्तकी शिक्षण घेतानाच व्यवस्थेसाबत काम करून प्रत्यक्ष कामाचा अनुभव घेणे हे विद्यार्थ्यांसाठी खूपच फायद्याचे आहे.

- डॉ. किरण देशपांडे, प्राध्यापक

मूल्यांकनासाठी कोणत्या गोष्टींची पूर्तता असणे अपेक्षित आहे, याचा सर्व माहिती संस्थाकडून भरून घेतली जाणार आहे. यासंदर्भातील परिपत्रक नव्हे तर मूल्यांकनास पात्र होण्यासाठी संचालक डॉ. अभय वाघ यांनी आवश्यक नऊ गोष्टींची पूर्तता संबंधित कॉलेज करते आहे की नाही याची सोमवारी प्रसिद्ध केले.

APSIT team-NBA Status Portal in news



A moment of pride:Honourable Minister Shri.Vinod Tawde with Shubam Mishra(BE Computer)

FACULTY PUBLICATIONS

Prof. Mayuri Jain, Prof. Sukhada Aloni and Prof. Pravin Adivarekar has published paper titled "Improving the Security of e-Documents using Multiple XML Digital Signature" in ICASTe-2018 held on 20th and 21st of April 2018 at APSIT.

Prof. Sofiya Mujawar and Prof. Ramya.R.B has published paper titled "Privacy Preserving Public Auditing for regenerating code based cloud storage using AES and ABE" in ICASTe-2018.

Prof. Mayuri Jain and Prof. Merlin Jacob has published paper titled "Survey on variants of QWERTY" in ICASTe-2018.

Prof. Brinal Colaco and Prof. Archana Kotangale has published paper titled "Sensitivity Analysis using Social Networks to Identify Suicidal Tendencies" in ICASTe 2018.

CONFERENCE CHAIRED

Prof. Sachin Mlave was the conference chair for the International Conference on Innovations in Computer Technology and Application (IC2TA) organized by the Computer Engineering Department on 4th and 5th January 2019 under the umbrella of Prism of Conferences international Conference on Advances in Science, Technology and Engineering (ICASTE-2019).

STTP/FDP/WORKSHOPS/SEMINAR ATTENDED

Prof. Sachin Takmare has attended Bennett univesity Machine learning workshop which was held from 21st to 23rd July 2018 at Fr Rodrigues COE, Bandra, six days workshop on PL/SQL at Wadiya College of Engineering, Pune and Seven days workshop on 'Ethical Values' organised by APSIT, Thane in Association with AICTE, Delhi

Prof. Amol Kalugude has attended Bennett univesity Machine learning workshop which was held from 21st to 23rd July 2018 at Fr Rodrigues COE, Bandra and Elastic stack Workshop from 24th to 26th December 2018 at APSIT.

Prof. Archana Kotangale has attended 6 days STTP on Cloud Computing from 31st December 2018 to 5th January 2019 held at APSIT.

Prof. Jaya Gupta has completed STTP on Machine Learning: Recent Trend in Computer Engineering from 31st December 2018 to 5th January 2019 at APSIT.

Prof. Sofiya Mujawar has completed 6 days STTP on Cloud Computing from 31st December 2018 to 5th January 2019 and 5 Days STTP on Redhat Certified System Administrator(RHCSA) from 18th June to 22nd June 2018 at APSIT.

Prof. Ramya.R.B has completed 5 Days STTP on Redhat Certified System Administrator(RHCSA) from 18th June to 22nd June 2018 at APSIT.

NPTEL CERTIFICATIONS

Prof. Sukhada Aloni has completed 12 week course on Software Engineering from July to October 2018.

Prof. Brinal Colaco has completed 8 week NPTEL course on Big Data Computing from February to April 2018.

Prof. Sachin Takmare has completed 12 weeks NPTEL Certification in Artificial Intelligence from July to October 2018.

Prof. Merlin Jacob has completed 8 week NPTEL course on Programming, Data Structures and Algorithms using Python from August to September 2018.

Prof. Sofiya Mujawar has completed NPTEL certification on Computer Networks and Internet Protocol from July to October 2018 and Problem Solving through Programming in C from February to April 2018.

Prof. Mayuri Jain has completed 12 week course on The Joy of Computing using Python from July to October 2018 with Elite+Gold score.

Prof. Archana Kotangale has completed 8 weeks NPTEL course on DBMS from February to April 2019 with silver+elite score and 12 weeks course on Discrete Mathematics from July to October 2018 with elite score.

Prof. Pravin Adivarekar has completed 8 weeks NPTEL course on R Engineering with elite score.



STUDENTS ACHIEVEMENTS

The journey is as important as the outcome

At COMPs, the students are encouraged to grab every opportunity and unleash the potential within them by participating or organizing. The students of our department has yet again proven their mettle by participating and winning prizes in various technical events

SMART CITY IDEATHON 2019

Their excellent idea for solving the problem of theoretical learning being practised in majority of institutes proved to be well accepted by the judges earning them the first prize for a national event organised by APSIT.

Team Members (from left to right):
 Utkarsh Naik (T.E IT)
 Charandeep Singh (T.E Comps)
 Aishwarya Muchandi (T.E Comps)
 Tejal Tandel (T.E IT)
 Debashish Choudhury (T.E IT)



WINNERS OF SOLVE FOR COLLEGE: HACKATHON AT APSIT

The team from SE Computer made us proud by being among the two teams in the Intra College Hackathon held on 16th and 17th March 2019 at APSIT. The problem statement that was given to the teams was to develop an Invoice Data Extraction using Machine Learning wherein the details from the Invoice like Date, Shipment Number, Customer Information, Amount in proper currency etc. was to be displayed.

Winners of Intra-College HackScript 1.0
 TEAM MEMBERS (From Left):
 Jatin Saini (S.E Comps)
 Anmol Majithia (S.E Comps)
 Ujjwal Jain (S.E Comps)
 Piyush Savarkar (S.E Comps)
 Shail Shroff (S.E Comps)



WEB DEVELOPMENT TEAM

The Department website is maintained by a team of students from SE which includes Jatin Saini, Anmol Majithia, Piyush Sawarkar, Deepak Yadav and Anooj Sarvankar from SE Computers under the guidance of HOD, Prof. Sachin Malave.

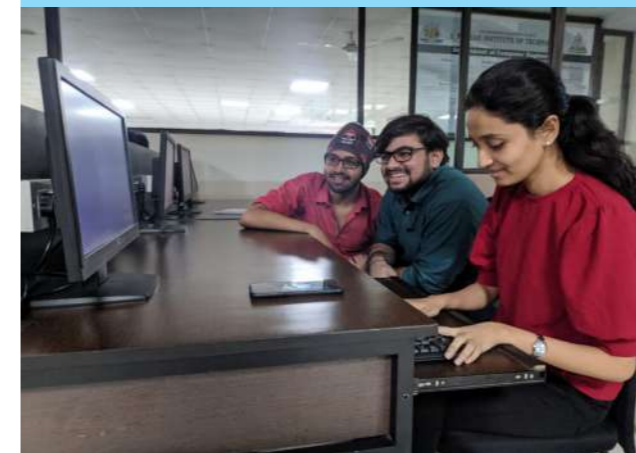
TEAM MEMBERS (From Left):
 Jatin Saini (S.E Comps)
 Prof. Sachin Malave (HOD, Comp)
 Anmol Majithia (S.E Comps)



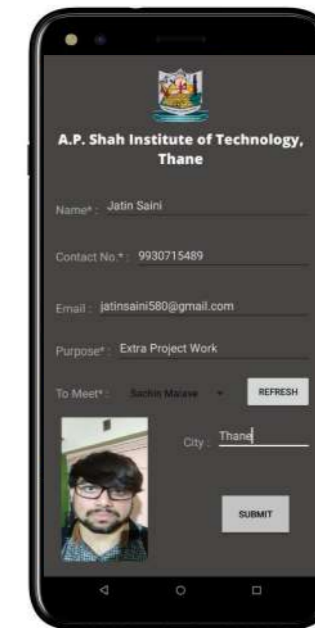
APP DEVELOPMENT TEAM

APSIT provides a techno-friendly conducive environment for budding Engineers to design and develop Android/iOS APPs.

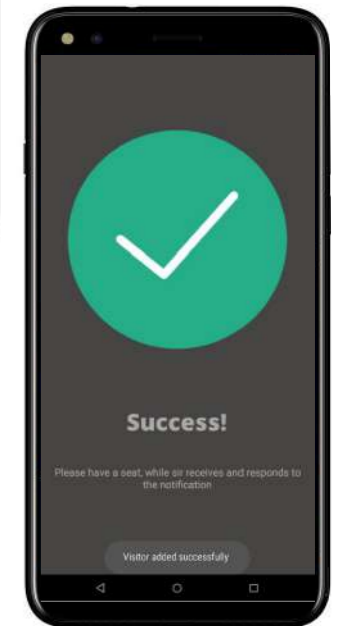
A team of Students from SE comprising of Jatin Saini, Anmol Majithia, Amrutha Deshpande from SE Computers under the guidance of Prof. Pravin Adivarekar have successfully developed an app which will notify the Head of the Department as well as the faculties about visitors at the reception. The visitors have to fill a form in the app at the reception. This gets forwarded and the intended persons can either accept or decline the request of visitors and the notification of the response will be sent to the receptionist through the app so that appropriate actions can be taken.



TEAM MEMBERS (From Left):
 Anmol Majithia (S.E Comps)
 Jatin Saini (S.E Comps)
 Amrutha Deshpande (S.E Comps)



VISITOR'S APP



STUDENT PUBLICATIONS

Conference/Journal	Student Name	Title
ICASTE-18	Sejal Chorge	Anti-Theft Mechanism in Retailing System
	Ankita Walavalkar	Health @ Fingertips
	Rahul Agre, Urvashi Jalan, Aditya Aurange, Simran Dhanota	Yarn Quality Assessment
	Manoj Thayil	M-Ticketing and Location tracking of public transport
	Karishma Konar, Janhavi Sapre	Efficient traffic monitoring and controlling system
	Monika Singh	Biometric Based Digital Documentation
	Darshan Jain, Aakash Desai, Arun Jaiswal	Real Time Driver Drowsiness Detection System
	Vishal Panchal	Stock Market Closing Price Prediction Using Machine Learning
	Shradha Pansare, Yogita Ozarde, Drushti Patel	Smart Garbage Monitoring System

ARTICLES

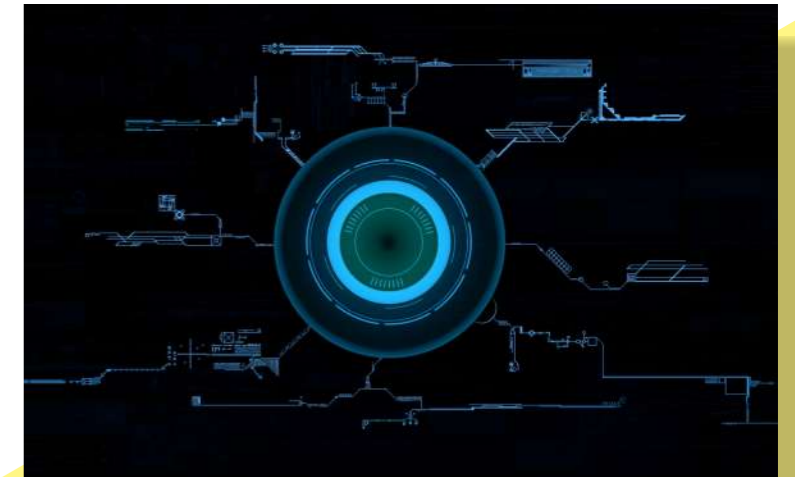
Innovative young minds on fire

Writing a technical article that can be published in a magazine, conference or journal is a challenging undertaking. Witness our dreamers thinkers and doers trying to share their knowledge of a technology, project or software they are excited about.

LET ME ASSIST YOU

Nakulesh Jayakrishnan, TE Computer

Imagine an assistant as powerful and as intelligent as Tony Stark's JARVIS. Exciting, right? The possibilities would be endless. If it existed, we would not have any real human friends. Maybe, we did be able to craft our own super-power suit, provided the individual possesses the smartness and funds required for it. Maybe even a time-travelling terminator-like robot in the future. Seems impossible, doesn't it? As a matter of fact, we are nowhere close to developing a system that can completely blur the line between A.I. and humans. It is rather disappointing, isn't it?



The current state of A.I. development is quite rapid and notable. There is some significant progress in developing assistants and bots that interact just like humans. We are now closer to developing a real-life 'JARVIS' than ever before. There exist systems that effectively are indistinguishable from a human, in very few aspects. That's progress, right? The assistants in existence such as Siri, Cortana and the Google assistant serve as useful assistants for basic tasks.

Moreover, you can use them just to hear a joke or even for small talk! We have all been there, talking to an assistant testing it's ability, asking all kinds of amusing questions.

In this case, unknowingly, you are performing a Turing Test. The Turing Test, developed by Alan Turing, is a method of inquiry for determining whether or not a computer is capable of thinking like a human being in terms. To better understand Turing Test, imagine a machine interacting

with you and there's a smokescreen between you and the machine. If you fail to correctly tell whether you are interacting with a machine or a human, the machine passes the Turing Test.

The Google assistant's Duplex feature, unveiled at Google I/O 2018, was truly a shocker! "Is this for real?", many asked themselves. The phone call sounded so real, like it was just a normal phone conversation, just a lady booking a salon appointment. According to Sundar Pichai, the CEO of Google, the assistant can understand the nuances of conversation and adapt to the ongoing real-time conversation. It even adds pauses and voice-modulations is associated to normal human speech. Then there's Sophia, the world's first robot-citizen, that changes the way we perceive robots. It or She, as you prefer is able to exhibit human expressions! Also, Sophia has a sense of humor. Who would have thought that a robot could look and interact almost like a

human? Ideally, she can live on forever. An upside to being a robot! Sophia is not the only one. There are several robots out there that exist with the purpose of making our lives better.

In future, we may expect many advancements in the AI-powered assistants. There will be drastic improvement on how well they respond or interact with humans. Hopefully, we will have an assistant that can pass the Turing Test and interact like an actual human. The way we interact with other humans or with machines may change drastically with the significant ongoing progress in AI in the near future. Although, a real life JARVIS seems like a far-fetched idea, we can surely look forward to several advancements in AI assistants that bridge the gap between human interaction and machine interaction.

Jatin Saini, a Student from S.E Computers completed 6 courses i.e maximum course available to appear for the exam at a time on NPTEL .Jatin completed the course on Problem Solving through Programming in C with a score of 90 percentage.

The courses successfully completed by him are:

- 1) BlockChain Architecture
- 2) Problem Solving through Programming in C.
- 3) Programming in C++
- 4) Computer Architecture and Organization
- 5) Data Mining
- 6) Programming, Data Structure and Algorithms using Python.



Bhavin Kalsariya, a Student from S.E Computers completed 1 course on NPTEL with scoring 89% (Elite + Silver) in Programming in java

ENTREPRENEURSHIP

NIBODH is the start-up created by Bhavya Gaglani (S.E Computer) and his team.

The aim of his start-up is to provide all the information about schools and overall education sector and make education skills based . So that you choose "The best for your child".

The Services provided by us are as follows:

- Searching of schools:

Finding it difficult to search for schools and go there physically . We will be providing a full and complete online portal where you can search , filter them according to your preferences and find the best one .

- Provides comparing of schools

We will provide comparisons of schools so that you can make sure which one of them is the best.

- Provides all the small details of school as well.

Do not worry we will be covering all the small details : Fees , Location , achievements of school.

All of them.

- Online as well as offline career guidance.

If you have any difficulties about what to do next ? After school. If you have some ideas about your future and want guidance we are here !

Mentoring.

- Provides internship .

Have some extra skills and looking for side by side job opportunities! Want to explore yourself more and be ahead because we are providing some great opportunities depending upon your skills.

- Provide free sessions to schools as a social cause .
- Common topics where students need companions such as bullying, cyber crime and many such topics will be covered

Team members :

Bhavya Gaglani(Co - Founder, Chief Everything Officer)

Madhur Sharma(Co - Founder , Initiative Officer)

Kunj Shah(Co - Founder, Tech Titan)

Deep Vira(Ambassador of buzz)

Yashvi Shah(Catalyst)

Palak Shah(Dream Alchemist)



SPORTS & EXTRA-CURRICULAR ACHIEVEMENTS



Mugdha Agsekar and Shilpa Chandra of TE Computers won the first prize in Badminton Doubles competition during OJUS 2019.

Mugdha Agsekar also won the first prize in Badminton Singles competition held during Ojus 2019.



BIG DATA

Mugdha Asgekar(TE Computer)

Big data is extracting trends, insights and patterns from enormously large data sets. Germany used big data to win the FIFA World Cup in 2014. If you give some thought to it, you will wonder why is big data used in some aspects and not in others. Why not in healthcare, education, crime, statistics, weather patterns and most importantly environment and

major critical issues in our country India?

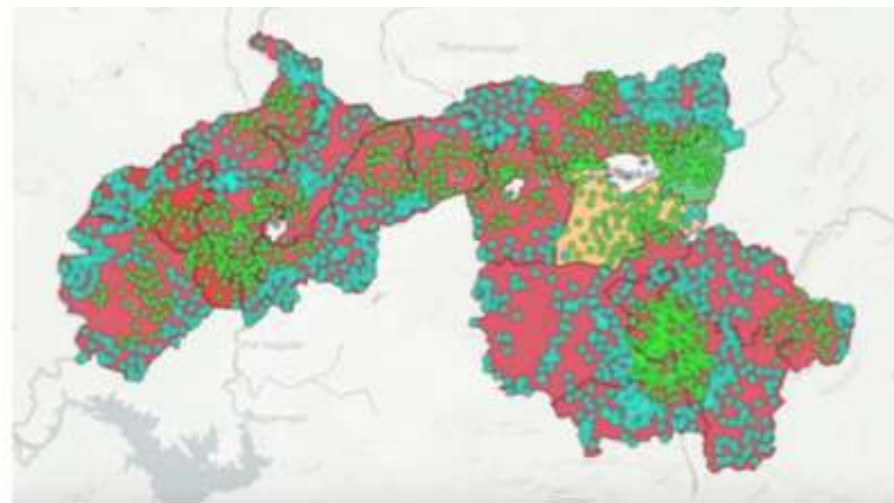
Well it's easier said than done. The single most bottleneck was the data itself. Data was recorded on paper and that too in many regional languages. There were datasets which had two villages having the same name or even pronounced and written differently. In one dataset Panjim

was called Panjim while in the other dataset Panjim was called Panaji. Wouldn't it be great if the datasets could be drawn together regardless of their problems so that data driven decisions could be made for the better?

Let's look at a real-life scenario of how big data influenced decisions. Petroleum and three oil companies decided to open 10000 LPG centres so that clean cooking fuel was accessible to rural areas. To locate where the centres should be opened, they partnered up with the "Social Cops" organization. The decision of opening the LPG centre at the right place was crucial. So that any individual from their house had to travel less distance to access clean cooking fuel. Several things had to be considered, firstly the LPG centres would be controlled by entrepreneurs so they had to be profitable and second and most

important that the LPG gas centre was accessible to all within 10 kms of their homes. To achieve this goal, traditionally it would require many field officers and hands-on map but they decided to do it all through big data. Social cops team worked with the data provided by the gas companies about supply demand, number of consumers and sales. But the companies would care only about their profit right? What about the villages where people still use wood as a fuel? Every one of India's 640000 villages were mapped and brought together with 600 external data sources of infrastructure, population and so on. But something

wasn't right, they also had to count in the already existing LPG centres. Within a month 17,000 of the distributors across India downloaded the organizations app and submitted their location coordinates. Now that they had all the data available, they made the data talk together through data intelligence and data algorithms. For an example: it knew that Bombay was changed to Mumbai in 1995 and likewise some others. But the question still remained where to locate the LPG centres?



- Green dots - All Villages
- Blue dots- Villages without LPG centre nearby

Sundargarh district of Orissa

The best fit for a centre would be a centralized place having a market where villagers already go there, having good roads for commutation, an ATM bank nearby and electricity.

All these parameters were used by algorithms to create enormous data and pinpoint the exact location where LPG gas centre is to be placed. Big data can do such amazing

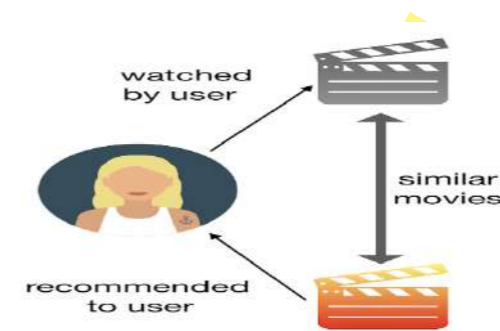
wonders like this one and come up with smart decisions that could help the country grow economically and also socially.

CONTENT BASED FILTERING

Suraj Shetty(TE Computer)

What Is Content-Based Filtering?

When a friend asks you for a movie recommendation or any other recommendations, it's natural to ask what kinds of movies they like. From there, you could think of a few movies that are similar to the things we have watched and liked in the past. This process, of recommending content based on its features, is at the heart of content-based filtering, the technology used behind Netflix recommendation engines.



WHY CONTENT-BASED FILTERING?

Content-Based filtering has a number of advantages, especially in certain circumstances.

1. Results is highly relevant to Our Expectations. Because content-based recommendations rely on characteristics of objects themselves, they are most likely to be highly relevant to a user's interests. This makes them valuable for organizations with massive libraries of a single type of content.

2. Recommendations are transparent. Another advantage is that the process by which any recommendation is generated can be made transparent, which may increase users' trust in their recommendations. With collaborative-filtering, the process is more of a black box—the algorithm and users alike may not really understand why they're seeing the recommendations they are.

3. It's technically easier to

implement. Compared to the sophisticated math involved in building a collaborative-filtering system, the data science behind a content-based system is relatively straightforward. The real work, as we've seen is in assigning the attributes in the first place.

CHALLENGES OF CONTENT-BASED FILTERING

1. Scalability is a challenge. As we know that the key requirement when it comes to content-based filtering is domain-specific knowledge. Furthermore, manual tagging of attributes has to continue as new content is added.

2. Attributes may be incorrectly or inconsistently applied. Content-based recommendations are only as good as the subject-matter experts who are tagging items. When you have hundreds of thousands (or millions) of items, it can be a challenge to ensure attributes are applied consistently or accurately.

In this recommendation system the contents of the movie (overview, cast, crew, keyword etc) is used to find its similarity with other movies. Then the movies that are most likely to be similar are recommended. This can be done through content based similarity easily.

GENOME SEQUENCING AND GENE EDITING

Aishwarya S Muchandi(TE Computer)

Since the illnesses, an individual experiences in a life time, are largely determined by their genetics, there has been significant interest to better understand our genetic makeup for years. Our progress was stalled by the complexity of data needed to be evaluated for understanding genetic makeup. But now, with the advances in artificial intelligence and machine learning applications, researchers are better able to interpret and act on genomic data through genome sequencing and gene editing.

A genome sequence is a specific order of DNA building blocks (A, T, C, G) in a living organism; the human genome is made up of

20,000 genes and more than 3 billion base pairs of these genetic letters. Sequencing the genome is a critical first step to understanding it.

The latest technology called high-throughput sequencing (HTS) allows the sequencing of DNA to occur in one day—a process that once took a decade when it was first done. When changes are made to DNA at a cellular level, it's called gene editing.

Gene technology is restricted to a particular gene, hence it will differ from person to person. Hence it promises the development of precision or personalized medicine. Machine Learning will help identify

patterns within genetic data sets and then computer models can make predictions about an individual's odds of developing a disease or responding to interventions.

Google's tool DeepVariant uses the latest AI techniques to turn high-throughput sequencing (HTS) into a more accurate picture of a full genome. While HTS was available since the 2000s, DeepVariant is able to distinguish small mutations from random errors. Deep learning was instrumental in effectively training DeepVariant.

The Canadian start-up Deep Genomics uses its AI platform to decode the meaning of the genome to determine the best drug therapies for an individual based on the DNA of the cell. The company's learning software analyzes mutations and uses what it's seen in the hundreds of thousands of mutation examples it's analyzed to predict the impact of a mutation.

CRISPR, a gene-editing technology, is a collaboration between computer scientists and biologists. There are positive outcomes for "editing out" genes that might cause disease "editing in" genes that create high-yielding, drop-resistant crops, but it also introduces complex ethical, moral and legal implications. Most people can see the benefits of "optimizing" health by editing

mutated genes, but the issue is more complex when we begin to "optimize" the human race.

Another thing experts are working to resolve in the process of gene editing is how to prevent off-target effects when the tools mistakenly work on the wrong gene because it looks similar to the target gene.

One way of Approach is to design the learning systems extract heuristics from existing adaptive systems. Genetic Algorithms are Heuristic learning models based on principles drawn from natural evolution and selective breeding. Genetic Algos are also applied in areas of traditional ML problems, including concept learning from examples, learning weights for neural nets and learning rules for sequential decision problems.

The chromosome of the genetic algorithm represents a set of condition action rules for controlling any functions or actions of robot. The performance is measured on a resulting control strategy (using stimulator) in adverse conditions such as; tracking a prey, seeking a goal while avoiding obstacles. Thus

learning from multi-agent environments and also from the behavior exhibited from external agents. So hence focusing on learning competitive strategies against an opponent which is itself a learning agent.

This is a usual situation in natural environments in which multiple species compete for survival.

So initial studies lead us to expect that genetic learning systems can successfully adapt to changing environmental conditions

Artificial intelligence and machine learning help make gene editing initiatives more accurate, cheaper and easier. The future for AI and gene technology is expected to include genetic screening tools for newborns, enhancements to agriculture and more.

While we can't predict the future, one thing is for sure: AI and machine learning will accelerate our understanding of our own genetic makeup and those of other living organisms.



"SMART GADGETS ARTICLE"

Bhavik Jain, Ujjwal Jain(SE Computer)

Smart gadgets for smart generations

DEFINITION

A smart device, as the name suggests, is an electronic gadget that's able to connect, share and interact with its user and other smart devices.

CONCEPTS

A smart device is an E-Device, generally connected to many other devices or networks via different networking devices and network protocols such as Bluetooth, WI-FI, radio-waves, etc.

- The term can also refer to those devices that contain similar properties of Ubiquitous computing, including although not necessarily (artificial intelligence) AI.
- Smart devices are interactive electronic gadgets that can understand simple commands and basic instructions sent by users and help in daily activities. While many smart devices are small, portable personal electronics, they are defined by their capability to connect to a network to share and interact accordingly.

THEORIES INCLUDED:

- **UBIQUITOUS COMPUTING**-It is a paradigm in which the processing of information is linked with each activity or operation is performed. It involves connecting E-devices and also includes embedding microprocessors to communicate in between and transfer information. Devices that use ubiquitous computing have constant availability they are fully connected. This computing technique of computing focuses on learning by removing the complexity and increases optimality while using computing for different general and usual activities.
- **ARTIFICIAL INTELLIGENCE**-Artificial intelligence (AI) is an area of computer science that generally focuses on the creation of intelligent machines that work, process and act like humans. Some of the operations of machine with artificial intelligence are designed for include:
 - **FEATURES OF AI-**
 - 1-Speech recognition
 - 2-Planning
 - 3-Problem solving
 - **CLOUD COMPUTING ROLE**- Cloud computing and the Internet of Things (IoT) are distinctively two separate technologies that are closely knitted. With these two technologies combined, it will lead to new inventions. It will change the way how we store, manage and uses information.

- Generally, it is a complex web of physical devices, vehicles, home appliances and smart gadgets.

SOME OF COMPANIES MAKING SMART GADGETS

- 1-**GOOGLE**- Alexa is a virtual digital assistant developed by Amazon for its AMAZON ECHO and line of computing devices. Alexa's Function are like those of our other intelligent assistants such as Apple Siri, Microsoft Cortana, Google Assistant, and SAMSUNG BIXBY
- 2-**JOLLA**-It's a developer of mobile devices, built on its own open operating system (OS), called Sailfish, which features live multitasking, and gestures based on the natural movements of your hand.
- 3. **MOOV**- It offers a wearable fitness tracker that uses three sensors to form a nine-axis motion-sensing system. Paired with MOOV's software, the data collected by this hardware can reconstruct your movements in 3D and guide you on how to improve your workout and how to prevent injuries.
- 4. **CLINIC CLOUD**-It offers "the medical kit of the future" with a digital stethoscope and a non-contact thermometer for the home. Parents can record and monitor children's fever, coughs, and colds, and even get medical help at home through the iOS or Android app.

RECENT INNOVATIONS

- Amazon Alexa. ...
- Google Assistant. ...
- Wink Hub 2. ...
- Samsung SmartThings Hub. ...
- Best Speaker: Amazon Echo (2nd Generation) ...
- Best Lights: Philips Hue. ...
- Best Light Switch: TP-Link HS200. ...
- Google Assistant...

ADVANTAGES

- 1-Convenience at Various Levels. ...
- 2-An Unprecedented Level security...
- 3-Peace of Mind to Vulnerable people and their caregivers. ...

DISADVANTAGES

- 1- Dependency on Internet...
- 2-Dependency of professionals...

NOTHING

Tejas Deshmukh(TE Computer)

The word “Nothing” is so mysterious! No one knows anything about nothing. But we have the power of imagination; we can define nothing in different ways looking at it with different perspectives. It’s gonna get a little heavy out there, but stick up to understand what and why “You are what you are”..!

Scientifically, according to the big bang theory, universe and what lies beyond, emerged out of nothing. Particles get created and destroyed in the very millionth of a second. So, Can Nothing be said to be in existence because of something? If so, the universe shouldn’t have existed. In fact, we don’t know, and there’s no way of knowing this.

Other perspective to look at nothing can be “an object to sense”.Nothing is not something. When there are natural calamities like fires, cyclones, tsunamis, etc; houses get destroyed and are left with ‘nothing’.People die and are turned to ashes; they become nothing. This arise to me that something is getting turned to nothing. And we say, universe came out of nothing ;and now ,we are saying people die, so we are turning to nothing. So, can we say that something came out of nothing, and now nothing will come out of something? This will make your brain’s neurons dance. This is in fact the question which may never be answered, no matter how much further the human race goes.

We know energy cannot be destroyed, it can only be only converted from one form to another.So maybe a “thing” cannot be destroyed, it can only be something or nothing. That’s how I think of nothing. So this makes us immortal. We existed out of nothing and we are something right now just

to become nothing again and will become something again. Understand this similarity? It’s a loophole.

It will take a long time to understand nothing. A book is a book although nothing is written in it. We know nothing about our existence. What is the purpose of our existence? Did this ever make you wonder ..? If yes, then well, you really are ‘something’.....

Jokes apart, but if you do , then you really think out of the box, think something related other than just living your life by the rules defined by our ancestors. But the matter of fact is, I came out of nothing; and from nothing to nothing, I will travel the dull way which is leading to nothing. We are all going to be ashes, that’s our destiny, they say. But I won’t call it a full stop.

People say that you don’t leave without nothing, that, other people will always remember you. Well, they will eventually, die one day too and ,even if my name survives; I feel ,even if they carry forward my name, there’s a saying “Nothing is there in the name”. They will remember my name, but if they cannot even remember my work and who I was, there’s nothing that they know they can relate to a person’s life. In short, they’ll know nothing about me and thus my life will be ended in nothing and so do everyone’s will. It won’t matter if it was a he or a she, a poor or a rich, a good person or a bad person, a smart or a dull, everything will turn to nothing. It is sad when we think of it from the future point of view. It’s like having no motivation to live out the life and no fear of the unknown death.

But what if we can find a purpose? I don’t know whether we are living in a simulation,a virtual reality or just,

this is the reality, If we can achieve something or nothing;we must understand that this is not something that matters to us humans.

Have you ever seen a child who knows nothing , but is still smiling without a purpose? We can create purposes. What matters is living the positive moments in our life enjoying them to our fullest and that is what makes our life, a ‘life’.A life without death wouldn’t be a life. We don’t know what lies ahead; we know nothing, but think in a way; we cannot understand the true meaning of happiness without sadness; the same way, we cannot understand the true meaning of something that we have right here, right now; without nothing.So for me, I think of nothing as a positive “thing”, even if it starts with a “NO”.

Maybe it is the absence of someone in your life, you have nothing in your life , your relationship has ended in a ‘nothing’, everything is valuable, even ‘nothing’.This nothing, this absence, is going to teach you something in your life, may be to move forward and never look back, accept the past which had something that lead you to nothing, or go beyond whatever you are now currently.

Our life with the huge life span we have, is worth living. Thus, even if we know nothing about nothing, We know many things about something; and sometimes, it is a wise decision to let the unknown be unknown.

FOR THIS MOMENT IS LIFE

Gauri Deshpande (TE Computer)

If you cannot relate to whatever I am about to tell you, either you are not from this generation or not from this planet! Well if the latter part is true, HI you extraterrestrial species! Well, jokes apart, I want you all to take a wild guess as to what it could be!

Now if your guess was not following traffic rules or littering the streets, unfortunately you guessed it wrong! Although that might be something to talk about wouldn’t it? As a responsible citizen, it would definitely be a good idea to spread awareness through a platform like this, but we will save that for some other time! For now, let’s pretend we are responsible adults who know right from wrong! What I really want to talk about in this post is this...I’m sure all of you must have visited a place of surreal beauty, where everything that you laid your eyes upon seemed like it had dropped down straight from heaven! Apart from admiring the beauty around you for no more than 5 seconds, what is the next immediate thing you did? We all

know the answer to this one...We reached out for our pockets, took out our phones and started showing off to the world how amazing our life is! You know what would have been more amazing?

Admiring that same view for a little longer than 5 seconds and filling your bones with the positivity that laid around. We are in that time of our era where ‘evidence’ is more important than ‘memories’. I mean I still remember my childhood days...oh the 90’s... where there were so many endless memories made but there was no evidence of those memories, apart from some really hysterical photos that we could actually call candid! What we often forget is once a moment is gone, it’s gone! Can’t we put our phones in our pockets a little longer and just be? Be alive, be present, be thankful, be stunned by the beauty around us? Can’t we just live in the moment for a little while? Can’t we enjoy the hot delicious food without getting a perfectly angled Instagram photo of it? Yes, we can! You know how? By simply realizing the fact that at the

end of the day, when you look back at all the bewildering things you did or experienced, what matters are the memories that you took back, the way that moment made you feel, the burning sensation on your tongue you got by having a sip of that hot soup without capturing it first! Photos and evidence of you living that moment is secondary, but truly living in that moment is something that is primary!

In no way am I saying that you shouldn’t post pictures of that really yummy dessert you had or that really pretty resort that you visited over the weekend, most certainly do all those ‘tumblr’ things. But before you get so engraved in the virtual world, please do not forget to cherish all that you experience. Fill your eyes with that breath-taking sunset, relish your taste buds with that mouth-watering dish, dance your heart out to your favourite song. Do what everyone else is forgetting to do these days...LIVE...Just live in the moment.

For this moment is life!!!

ARE IDEAS GETTING HARDER?

Aditya Sable (TE Computer)

Robert Gordon, an economist at Northwestern University, says we’re unlikely to match the heights of discovery that marked the late 19th and early 20th centuries, when inventions such as electric light and power and the internal-combustion engine led to a century of unprecedented prosperity. It makes sense that we’ve already picked up of what some economists like to call the “low-hanging fruit” in terms of inventions. Could it be that the only fruit left are a few shriveled apples on the farthest branches of the tree?

If he is right, and there are only few big inventions left, aren’t we doomed to a dismal economic future? But few economists think that’s not the case. Rather, it makes sense that big new ideas are out there; it’s just getting more expensive to find them as the

science becomes increasingly complex. So, we’ll need more and more researchers to make sense of the advancing science.

Which is evident from the fact that a new research involving drug discovery, semiconductor research, medical innovation, and efforts to improve crop yields, have come to a common conclusion: the investments in R&D are increasing sharply while the payoffs are staying constant.

So, if we’re still doubling the number of transistors on a chip every two years, its only because we’re still putting more and more money and people into research. And to maintain a steady growth rate, we’ll have to double our investments in research and development over the next 13 years.While searching for the real cause, one may find that the

problem is that human researchers can explore only a tiny slice of what is really possible.So, what’s the way out?

Does AI have the potential to solve the kinds of problems that new innovation demands? Some experts now think that it can. The reason being,the bottleneck that has slowed development in various fields is exactly where deep learning excels. From largely affecting the areas of image recognition and language comprehension, to transforming the task of finding new drugs,AI and Machine Learning are excessively being used in complex sciences.

In a recent paper, economists at MIT, Harvard, and Boston University argued that the AI’s greatest economic impact could come from its potential as a new “method of invention” that ultimately reshapes “the nature of the innovation process

and the organization of R&D". So, the biggest impact of artificial intelligence will be to help humans make discoveries we couldn't make on our own.

Are Ideas Getting Harder Iain Cockburn, a BU economist, says, "New methods of invention with

wide applications don't come by very often, and if our guess is right, AI could dramatically change the cost of doing R&D in many different fields." Much of innovation involves making predictions based on data. In such tasks, Cockburn adds, "machine learning could be much faster and cheaper by orders of magnitude."

In other words, AI's greatest legacy might not be driverless cars or image search or even Alexa's ability to take orders, but its ability to come up with new ideas to fuel the Innovation itself.

TEAMWORK

Radheshyam Yadav (TE Computer)

Teamwork can be defined as the skill to work with a team of people collaboratively for achieving a particular goal. It plays an important part in the success of a business because it is important for colleagues to work in a team and try their best in all the conditions.



Characteristics of an Effective Teamwork:

In a group of people, the characteristics of the effective teamwork consist of the willingness to take responsibility and set aside the personal issues for achieving a common goal. Have a look at the characteristics of the effective teamwork:

- Credibility: All the people in the group should take responsibility and accept the credit for their actions as a team and not on an individual basis.
- Sense of purpose: There is a need to have a sense of purpose in the team for achieving a specific and clear mission. All the members of the team should believe that this mission is necessary to attain.
- Accountability: It is necessary that the teams must be accountable as a group for all their failures and successes. It means that you required rewarding the team as a group for their accomplishments if you are a business owner.
- Cooperative Spirit: There is a need for the spirit of cooperation in a successful team. All the members required to work collectively for achieving the specific missions. It can be tough if some of the individuals in the group are highly opinionated or strong personalities.
- Appreciation: All the members of the group should appreciate the knowledge's diversity, which the other individual in the group can offer. They should use the skills and knowledge of a particular member in a convincing way for achieving the organization's goals.

Types of Teams

There are four main types of teams explained below:

- Informal Teams : The main motive behind forming an informal team is social purposes. This type of team facilitates the employee pursuits of the common concerns such as improvement in the working conditions.
- Problems Solving Teams: These types of teams are formed when a problem can't get solved within the structure of the standard organization. The problem-solving team works in a cross-functional way for the betterment of an organization.
- Leadership Teams: The leadership teams consist of management that brings together for spanning the boundaries between the several functions in the company. The heads of finance, marketing, and production have to interact with each other and come with a common goal for the product.
- Self-Directed Teams: In these types of teams, the autonomy is given to decide how a work will be completed. The self-directed teams are offered with a mission by the company and then determine how to complete this purpose.

OUR COLLABORATIONS

Open Source Experimental Lab

Open Source Experimental Lab is a collaborative effort of APSIT and ASHNIK PTE LTD Singapore to impart skills in the areas of open source technologies including Database, Docker, Elastic Stack, NGINX, Cloud Computing to develop necessary industry skills.



AWS Web Services Educate program

Amazon Web Services & Educate program prepares students for booming technology of Cloud Computing. AWS certification is a doorway to IT industry.



Partnership with Leading India

APSIT joined the Leading India program of Government of India whose objective is to make Deep Learning and AI skills mainstream in India to fulfill trilateral needs of entrepreneurship, Industry academia partnership and application-inspired Engineering Research.



OUR RECRUITERS



ABOUT THE DEPARTMENT

Department of Computer Engineering is the largest and most research strong department of its kind in Mumbai University. The Department was established in 2014 and currently offers a B.E in Computer Engineering. The department boasts a vibrant student body and a stellar faculty team of qualified and experienced professors. The Department has developed many state-of-art, fully air-conditioned laboratories with more than 200 desktop computers in various fields of Computer Engineering such as High Performance Computing, Web Technologies, Cloud Computing, Software Engineering etc. thereby providing ample facilities for project development and research. The department has tie up with CSI and maintains close relationship with industries of repute. The department takes immense interest in conducting professional activities such as organizing workshops, seminars and expert lectures to meet the challenges in the IT industry. Our results are constantly on the upward trajectory and the phenomenal growth of the department is attributed to the winning combination of dedicated and experienced faculty, brilliant students and strong administrative support from the institute.

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