



XAVIER INSTITUTE OF ENGINEERING

CONNEXION 2019

**SCALING
NEW
HORIZONS**



"It is dangerous to make
everybody go forward by the same road:
and worse to measure others by
oneself."

Saint Ignatius Of Loyola
FOUNDER



“It is not the actual physical exertion that counts towards a man’s progress, nor the nature of the task, but by the spirit of faith with which it is undertaken”

Saint Francis Xavier
PATRON

XIE VISION

**TO NURTURE THE JOY OF
EXCELLENCE IN A
WORLD OF HIGH TECHNOLOGY.**

XIE MISSION

**TO STRIVE TO MATCH GLOBAL
STANDARDS IN TECHNICAL
EDUCATION BY INTERACTION
WITH INDUSTRY, CONTINUOUS
STAFF TRAINING AND
DEVELOPMENT OF QUALITY LIFE.**



CONNECTING THROUGH CONNEXIEON

The ConneXIEon has been developing a profound bond among the Xavierites by connecting them to all the happenings on their campus, Xavier Institute of Engineering. Also, another purpose of this annual college magazine is to unlock the hidden potential within the students, the faculty and the staff members.

The objective is to publish up-to-date, qualitative and research-oriented articles alongside relevant and insightful reviews and reports of the activities and events established at our institute. As such, the magazine aspires to be vibrant, engaging and accessible, and at the same time integrative and challenging. Like every year, the current theme- Scaling New Horizons promotes in sharing and producing the knowledge revolving around ever-advancing technology.

The magazine preserves the connection to the institute's vision, that is, to nurture the joy of excellence in a world of high technology and mission- to strive to match global standards in technical education by interaction with industry, continuous staff training and development of quality of life. The magazine provides a perfect platform to highlight the technical, literary and artistic segments of those affiliated to XIE.

As the Head Curator of ConneXIEon, I would like to thank all the students, the teaching and non-teaching faculty and the managing committee for their thoughtful and continuous support in the progress of its own prodigy- the ConneXIEon. I want to extend my sincere thanks to my team for the support to make this magazine stand out.

Ms. Meghna Borate
Head Curator

PREFACE

It is with great delight that we at the Magazine Committee present to you the 14th edition of our annual college magazine ConneXIEon. With the alarming rate at which technology is progressing, the digital revolution is taking place in front of our very own eyes. Increased data speeds, networks that encompass even the remotest regions of the world and the affordability of the latest in technology has penetrated the world like never before. The world has never been as connected as it is today and it will only get better. From highly developmental tech like bio-informatics to rapid progress in artificial intelligence, it won't be long before we've colonised Mars!

This year as we talked about a theme for the magazine to revolve around, we came across a lot of good topics and after some deliberation we decided on an comprehensive theme 'Scaling New Horizons' which broadly encapsulates all the exciting things that are happening or will eventually come about in the near future to anticipate and look forward to.

In the last year we saw a lot of New Horizons, which included:

- The decriminalisation of homosexuality in India.
- SpaceX launched the most powerful operational rocket ever in Falcon Heavy V.
- The Indian Air Force got its first woman fighter pilot in Avani Chaturvedi.
- Astronomers found the brightest object from the Universe's infancy.
- Historic summit between North and South Korea.

We are grateful to have received a wonderful response from our peers as you'll see in the content ahead displayed through a variety of literature and art and would like to thank all the authors for contributing towards making this magazine possible.

With the theme and content in mind we set out to create an aesthetically and intelligible pleasing magazine which I'm pleased to say we've done, thanks to the hard work of our entire team and our head curator and mentor Meghna Borate.

The views and opinions expressed in the magazine belong solely to the authors and do not in any way represent the views of the college and editorial team.

Happy Reading!

-The Editorial team



ConneXIEon 2018 launch at Spandan

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ConneXIEon Team 2018-19

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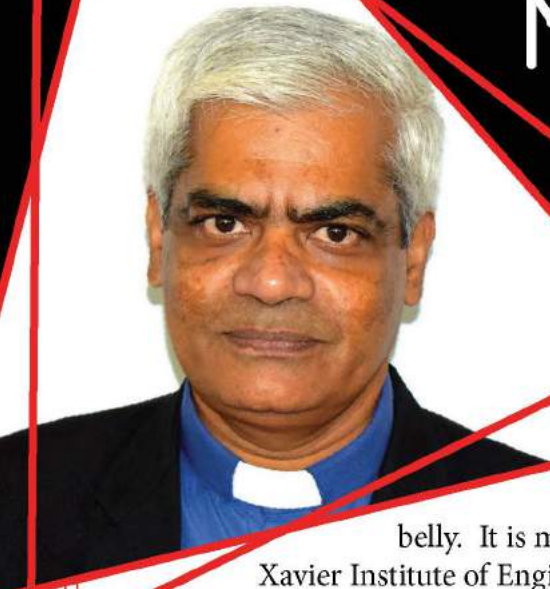


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MESSAGE FROM THE DIRECTOR



Dear Readers of ConneXIEon,

The name of the publication you are reading carries an acronym in its belly. It is meant to connect you with many who are very proud to be associated with Xavier Institute of Engineering (XIE), either as students, or staff and faculty members, or administrators. It is a technically fun place to be in because all the work and study and efforts in electronics and computers are easily drawn out from each one because of high ideals and much compassion. Fr Francis de Melo S.J. and Fr Reginald Tauro S.J, who sat on the chair that I now occupy, had vision, foresight, and organizational expertise to channelize everything through the concept of connectivity, since there is no individual existence unless it is lived in relation to nature, other human beings, and the divine. In Jesuit educational institutions there is no craving for intellectual excellence unless it fosters a total formation, with encouragement for extracurricular activities like, for instance, outreach programmes and social works. All the resources of XIE make one live for the community and the community lives for each one in it.

This general orientation leads to networking, not only within our college or national institutions but, especially because of the scientific fields we are working in, also on the international level. This year XIE signed an MoU with Marquette University, USA; Institut Catholique d'Arts et Metiers (ICAM), France; and Universitas Sanata Dharma (USD), Indonesia. Marquette has sponsored a Gait Lab that will serve children and adults affected by cerebral palsy, and help orthopedic surgeons know what kind of operation they should perform, once the kinematics of the patient is established. ICAM has invited our students to research on artificial intelligence in Paris this summer; a professor from USD has agreed to come to XIE to conduct a workshop on wind mills to promote sustainable energy.

Let us give ourselves a pat on our back. Times of India has rated XIE as one of the top 30 private engineering institutes, which include 10 IITs and 7 NITs in the country, and also given it a high perceptual score. To add to this, the reputed Higher Education Review magazine has recognized XIE as one of the top 20 promising Institutes in Maharashtra.

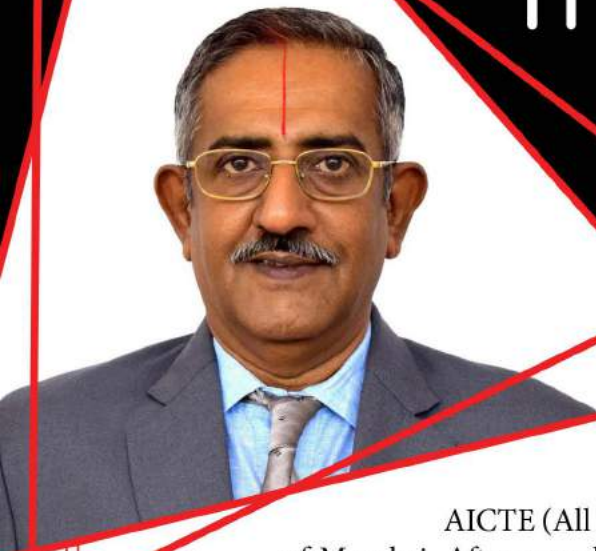
Since January 2018, our faculty and staff have been busy with the National Assessment and Accreditation Council (NAAC); after finally submitting the XIE credentials we expect to get a good grade; with it in hand, we shall apply for recognition to the National Board of Accreditation (NBA) meant for engineering colleges.

On the academic level, five a record number of our IT and Computer students from SE and TE have joined the list of 10 pointers. Academic excellence and intellectual formation are never compromised for cultural and extra-curricular activities. Two of our students, Harshvardhan and Aaron, made use of their Christmas holidays to get certified as Amazon AWS cloud experts in New York. To give an edge to deep learning and artificial intelligence, Prof. Jaychand is offering a python course with the help of Dr Thomas Schwarts S.J. from Marquette University. This year we have started Mission X-RAY (Xavier-Raheja Awakening Youth), an initiative in collaboration with Raheja Hospital to make our surroundings cleaner, greener, and noiseless.

What I always notice about XIE students is that they take it all in their stride, thanks to encouragement by the Faculty, and in them is the joy of learning, and much creative thinking that allows no defeat or discouragement. Always cheered up alongside you,

Fr. (Dr.) John Rose, S.J.
Director

MESSAGE FROM THE PRINCIPAL



Being established in the year 2005, Xavier Institute of Engineering runs four year degree courses in Bachelor of Engineering (B.E.) in the three streams, namely, Computer Engineering, Electronics and Telecommunication Engineering and Information Technology. All the three courses are recognized by AICTE (All India Council for Technical Education) and approved by the University of Mumbai. After completing the courses with a project satisfactorily, the B.E. degree is conferred by the University of Mumbai.

Moreover, the institute is gearing up for NAAC (The National Assessment and Accreditation Council) accreditation which is a move to assess and thereafter ensure the quality of education offered, and to keep the institute up-to-date in terms of academic and administrative performance. The outcome will brighten the prospects of the students in their all-round development.

The vision statement of the institute is “to nurture the Joy of Excellence in a world of high technology”, and the Mission statement is “to strive to match global standards in Technical Education by interaction with industry, continuous staff training and development of quality of life.”

Each issue of our magazine “ConneXIEon” is a milestone that marks the growth, which unfolds the students’ imagination and gives life to their thoughts and aspirations. It unleashes a wide spectrum of students’ creative skills ranging from writing to editing and designing the magazine. It also envisions the achievements of our students in various fields of their study. I congratulate the entire editorial team for their hard work and dedication in bringing out this magazine, which is like achieving a dream successfully.

The creative process is at the heart of innovation and often the words are used interchangeably. One cannot think in a creative manner unless one has the knowledge with which to think in a creative manner. It is a balance between knowing and acquiring. For creative thinking to deepen and extend learning, rather than be a mere enjoyable but superficial activity, it must be grounded in understanding of the knowledge gained at the institute.

Innovation and creativity are fundamental to all academic disciplines and educational activities. To build up and inculcate these creative habits and to stay apprised with the current requirements and the demands of industry, the institute conducts workshops on various subjects like IOT, Machine Learning, spoken tutorials, Python, Robotics, Digital Image Processing and Artificial Intelligence to name a few.

To invoke the creative genius, to inculcate habits leading to productivity, to develop decision-making and to concurrently work within a team, the students have been conducting and managing the entire cultural fest, Spandan, the technical fest, Transmission, and the sports fest, Sparx, on their own. The students have also participated in intercollegiate competitions and have won prizes for themselves and, therefore, for the institute. The institute beams with success and grandeur because of its students and their contributions.

I wish them all great success in all their endeavours.

Dr. Y D Venkatesh
Principal, XIE

MESSAGE FROM THE ADMINISTRATOR



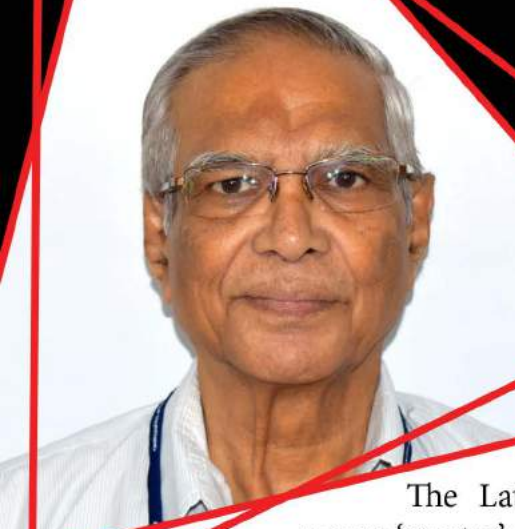
As a child I would watch the sun set on the seashore and wonder where the sun had disappeared beyond the horizon. Today I look at the new technological frontiers and wonder where the old technologies disappeared. The rotary dial telephone which I knew as a child is gone making way for the modern mobile telephone with a touch screen. Digital frontiers are rapidly changing and transforming our very lives. In the words of the great writer, thinker, and futurist, Alvin Toffler, “The future always comes too fast and in the wrong order.” How clear or blurred is this future? A reading of the article from Popular Science “100 greatest innovations of 2018” makes me feel that we are living in a wonderful time full of innovative changes. These innovations seem to suggest a method in the madness. We need to use technology to explore the frontiers of knowledge both outside and within ourselves. The modern disruptive technology that is a part of our day to day experience is reshaping our world and it is indeed understandable and knowable. Humankind is called to push boundaries and conquer these frontiers.

The past decade has seen a growth of technologies that has had a profound effect on our lives. Pervasive computing is driving the internet of things (IoT). Wireless Mesh Networks is making IoT more pluralistic and dynamic. Nanotechnology is designing and manufacturing incredibly small circuits and devices that are built at the molecular level of matter. Biotechnology is radically changing the boundaries of health care, agriculture, and chemicals. 3D printing is creating a revolution in manufacturing. Cloud computing, Big Data, and Artificial (Augmented) Intelligence (AI) have become pervasive and accessible to a far broader audience. Efforts are on to make cities smart so as to make urban areas more affordable, liveable, and environmentally friendly. Communication systems have grown exponentially. The number of telephone subscribers in India during 2004 was 76.53 million. As on November 2108, India has a total of 1193.72 million telephone subscribers. The Telecom Regulatory Authority of India (TRAI) has started the process of auctioning the 5G (Fifth Generation) spectrum (28 GHz, 37 GHz and 39 GHz) in India. Qualcomm has presented the first 5G smartphone reference designs for OEMs. The 5G standard promises data rates of 100 megabits per second for metropolitan areas and tens of Mbps for the remaining zones, IoT integration, improved coverage and reduced latency. This is one frontier that Indian Engineers can play a major role in pushing the boundaries of the Telecom sector.

As we set out to conquer these new frontiers let us work together, inspire each other, and understand our common bonds as human travellers on this grand journey, unravelling the mysteries and pushing the boundaries of these emerging frontiers. May it not be the “Future shock” which Toffler defined as the shattering stress and disorientation that we induce in individuals by subjecting them to too much change in too short a time but rather be “Joy of Excellence” where each and every human being is nurtured to bring forth from his or her inner self the boundless possibilities to march ahead to scale new horizons.

Fr. Fabian Barreto S.J.
Administrator

MESSAGE FROM THE OMBUDSMAN



“Magis” A Jesuit Catchword

The Latin word “magis” means ‘greater’ and suggests movement, a striving towards an ideal. The founder of the Jesuit order, Ignatius of Loyola, characterized Jesuits as striving for the greater glory of God in their way of life and in the work they undertake. In practice this meant that the goal of attainment would be a lifelong enterprise. As long as he is in this world, a Jesuit can never say that his apostolic work is done. There will always be something more that he is committed to do. And in doing it, God is glorified still more: *ad maiorem Dei gloriam* (to the greater glory of God).

Many believe that they have human potential that needs to be fully developed. Often, when they have reached a goal that others recognize and value, they feel that their life’s purpose has been achieved. At that point, no further striving is called for. However, there are some who throughout their lives keep setting newer targets to be reached. Dr Albert Schweitzer (1875-1965), a German theologian, studied to become a physician and an organist, and finally decided that caring for the sick at Lambarene in Africa best realized his life’s purpose. Such persons possess talent in different fields of human enterprise and enable that talent to blossom.

The histories of invention witness to persons who see possibilities which if realized enhance the human situation. They are motivated by care of the neighbour, love for the environment, improvement of existing facilities in the world and reaching out to the poor, the suffering, the disabled. Very often their untiring effects became the basis for others to continue pursuing the goals which their predecessors had striven after. One recalls the efforts of various individuals belonging to the Indian National Congress founded in 1895 which finally brought independence to India in 1947. We can recognize in them the spirit of the magis.

The spirit of the magis asks us to be persons who do not set limits a priori to what we are capable of and what we can achieve. A future beckons us to commit ourselves to worthwhile objectives as well as to the fullest realization of our hopes. Such commitment is to be made freely with the understanding that while the human mind can determine goals that it deems reachable, there is a divine economy present in the universe that inspires us to accomplish what is beyond our comprehension. In this category we can place individuals like Mahatma Gandhi (1869-1948), Nelson Mandela (1918-2013) and others like them.

Magis reminds us of what is and what can be. It calls our attention to what we can do for others and of not confining our energies to ourselves. It tells us that the human spirit, by its nature, seeks to respond to ever-growing challenges in the world. By doing so it enriches our personality and points to a fuller vision so that men and women attain their destinies—their God-given vocation to live life to the full.

Errol D’Lima
Ombudsman

ACHIEVER'S OF XIE FE SEM(II) MAY 2018

BRANCH	RANK	NAME OF STUDENT	CGPA
COMPS	1	DMELLO CANDICE JUDE	9.41
IT	2	YADAV ABHISHEK RAMJEET	9.11
IT	3	CHOKSHI SIDDHI MUKESH	9.02

SE SEM(IV) MAY 2018

BRANCH	RANK	NAME OF SUDENT	CGPA
EXTC	1	BAMBARDEKAR ANURAG HIMANSHU	9.60
	2	PAL ABHISHEK RAMSURESH	9.28
	3	PANDEY ANJALI UMESH	9.20
IT	1	PAWAR SAYALI SANTOSH	9.69
	1	SHINDE SIDDHESH UDESH UJJWALA	9.69
	2	SARAIYA TANMEY HARSHADAI	9.23
	3	JADHAV KAUSHIK ARVIND	8.62

ACHIEVER'S OF XIE SE SEM(IV) MAY 2018

BRANCH	RANK	NAME OF STUDENT	CGPA
COMPS	1	NAIK HEMENDRA MAHENDRA	9.85
	1	VAITY SHUBHAM AKSHAY	9.85
	2	KADEPURKAR PRAJAS SANJAY	9.52
	2	JOMICCHAN NIVYA JOMICCHAN JIJI	9.52
	3	ANUJA ANILKUMAR SAVITA	9.30

TE SEM(VI) MAY 2018

EXTC	1	TAMBE SHREYA ASHUTOSH	9.71
	2	YADAV SUSHILKUMAR RAJBAHADUR	9.39
	3	THORAT PRIYA GOVIND	9.18
IT	1	TORASKAR SIDDHESH SHRIHARI	9.52
	2	HATTYANGOI HARSHAL SHARAD	8.72
	2	JAIN MAYUR LAXMILAL	8.72
	2	MIRANI SMIT AKSHAY	8.72

ACHIEVER'S OF XIE TE SEM(VI) MAY 2018

BRANCH	RANK	NAME OF STUDENT	CGPA
IT	3	CHAURSIA POONAM MOHAN	8.32
COMPS	1	DAS AMRUTA AJAY	9.67
	1	MACHADO GRANIA GODFREY	9.67
	1	NAIR SHREYA PRAKASH	9.67
	2	TIWARI PRIYA PRADIPKUMAR	9.50
	3	BHAT AMRUTA RAVINDRA	9.33
	3	IYER DHAMINI VARADHARAJAN	9.33
	3	JAWALE SUJATA SHRIKRISHANA	9.33
	3	KADAM VIRAJ VISHWANATH	9.33
	3	RODRIGUES JASON RAPHAEL	9.33

ACHIEVER'S OF XIE

BE EXTC (MAY 2018)



9.06
SONAL PAWAR



8.98
SHELDON
PASSANHA



8.93
NAVITHA PUJARI



8.89
ANKITA DALVI



8.81
KARL PASSANHA

BE COMPS (MAY 2018)



9.31
SWARADI GODANE



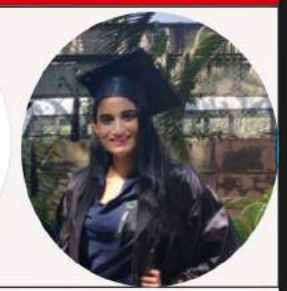
9.02
VINAYAK GAWDE



8.72
SANDRA FURTD



8.27
PRIYAL SHARMA



8.21
ZEB SHAIKH

BE IT (MAY 2018)



9.17
SWEKRITHA
HEDGE



9.12
CHINTAMANI
SATAVALEKAR



9.00
AMAN GUPTA



8.83
DHANASHREE
NARSALE



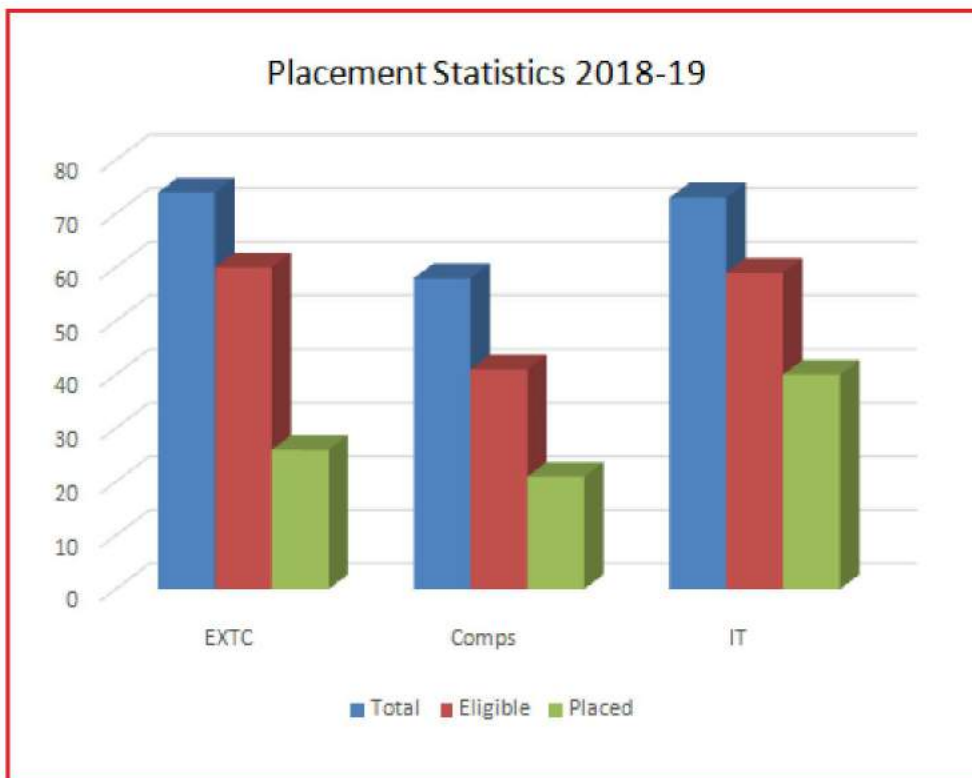
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RYYAN MASTAN

PLACEMENT AND TRAINING REPORT

2018-19

Dear Xavierites,

It gives me immense pleasure to present the report of placements for the 2018-19 batch. We had another successful placement season amidst an increasingly volatile economic scenario. The regular recruiters like Infosys, Capgemini and others reinforced their faith in the quality of XIE talent by hiring more numbers with increased pay packages. The institution strengthened its corporate relations with the season of placements witnessing a good response from first-time recruiters like Quantiphi, Cimpres. A new benchmark has been set for the CTC offered. The highest offer received is 9LPA and the average salary is 4.5 LPA.



We were able to attract a good number of companies in the first half of the placement season. About 40 companies have visited XIE so far and 98 out of 150 eligible students have been placed and we are still counting.

SAP company will be visiting XIE for campus recruitment 2018-19. XIE will be the third engineering college in Maharashtra visited by

SAP. Overall, this year's placement has been better when compared to previous years. Hopefully this trend will continue for the upcoming 2020 Batch.

-Naveen Kukreja
Training and Placement Officer.

COMPANIES VISITING CAMPUS



SECLORE



AND MANY MORE



interviews

INTERVIEW WITH THE CULTURAL SECRETARIES 2019

What made you stand for this post?

CS: Our very own XIE is an engineering college, hence, various technical events take place in our college. But cultural events, like dancing or singing or dramatics, also have a significant value in a student's life. For the past 2 years, I have closely experienced the working of the student council and the way they plan and organize various cultural events in college, like Open mic, Garba Night or the most awaited Spandan. Witnessing these activities encouraged me to stand for this post.

ACS: I've always been interested in cultural activities, not only participating in them but also organizing these events. Standing for this post not only helped me put my best foot forward events but these also enriched my sense of responsibility and self-confidence.

For a future CS, what qualities does a person need to have to be one?

CS: A Cultural Secretary is one of the most important members of the student council. Hence, the future CS should be well organized, have an eye for detail, bring objectivity to proceedings, have knowledge of all the committees and all the procedures to be followed. The future CS should also be a perfect bridge between the students and the authorities to resolve various issues so as to make each and every cultural event a big hit.

ACS: I think one needs to have the key qualities of leadership and team spirit along with good management and social skills. Being passionate about the job, and acting responsibly are also very important along with being able to work under pressure.

How do you plan to manage your studies with responsibilities?

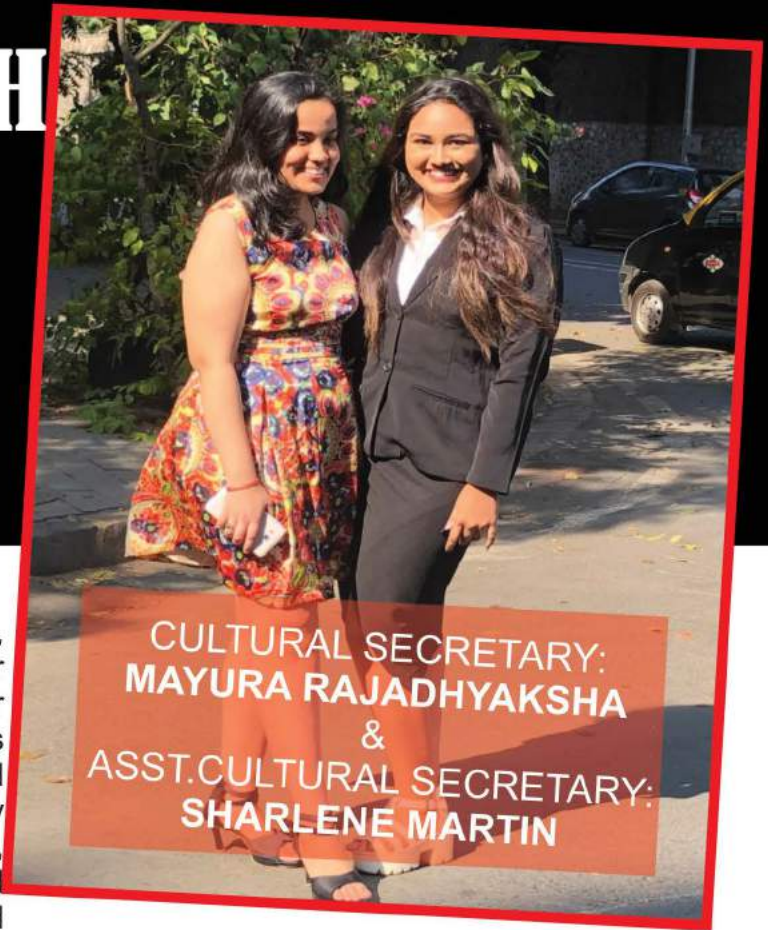
CS: Being a cultural Secretary does not give you the freedom to bunk lectures. After all, grades do matter! So, keeping up to this dual responsibility, I made sure that I attended all the lectures and the practicals. and after college hours I fulfilled my commitment as a Cultural Secretary.

ACS: Cultural activities do not take place daily. So, there is ample of time for studies. Also, our teaching staff never fails to help us in our studies and they make sure we do not fall back in class. With this and proper time management, handling studies becomes quite easy.

What message do you have for all the students of XIE for the upcoming fest?

CS: 'United we stand' is my message to all the Xavierites. My message to all the Xavierites is come together, work together, put in your efforts, showcase your qualities and talents and make Spandan 2019 a grand success by setting a benchmark for the next Student Council.

ACS: It is said that 'Unity is Strength' and the same goes for having a successful fest. We all have to work together, put in all our efforts and help understand one another to make our fest a hit. All our hardwork will surely pay off.



CULTURAL SECRETARY:
MAYURA RAJADHYAKSHA
&
ASST.CULTURAL SECRETARY:
SHARLENE MARTIN

INTERVIEW WITH THE **TECHNICAL** **SECRETARIES** 2019

What constitutes a TS position?

TS: A Technical Secretary of an "Engineering" college carries a lot of responsibilities. You have to make sure that the Intellectual Quotient of college students is not just limited to exams but extends to other areas too. This includes making projects, writing technical papers, developing an interest for what they learn by involving them in different events and competitions to test their brilliance. As a TS, my work is to get the stage and let them put a show.

ATS: The duty of an ATS consists mainly of two major roles, the first is being involved with the work of the student council and core committee and second, being up-to-date with their work. It's very important because only then, can one understand where we are currently standing and what more can be done or needs to be done for keeping to the deadlines. A second thing that I thought was crucial is to ask and understand what help and support your fellow colleagues/higher authorities want.

What are the different things that you did as a TS to make the fest better as compared to the previous ones?

TS: Laying the foundation was very important and making a good team. For the first time in XIE we had an entire month dedicated to technical activities: "Techtober" which had a coding marathon, the biggest ever coding festival in XIE involving participants from many colleges, along project exhibition in fields like IOT and web development. Different international colleges sponsored the event.

This year we have decided to host every event on a large global scale and involve leading software companies like Capgemini. An exhibition is planned of international Journals for publishing technical papers and of project topics to be exhibited. Different robots were made by our college students from scratch, we had gesture-controlled bots which could also be operated by mobile phones.

ATS: As I was a freshman last year, I had noticed that the first-year students' participation was very limited in the technical events. So, this year I tried to reach as many freshmen as possible and encourage them to take part in whatever way possible.

What challenges did you face in this year's fest? Mostly because of the fest being early?

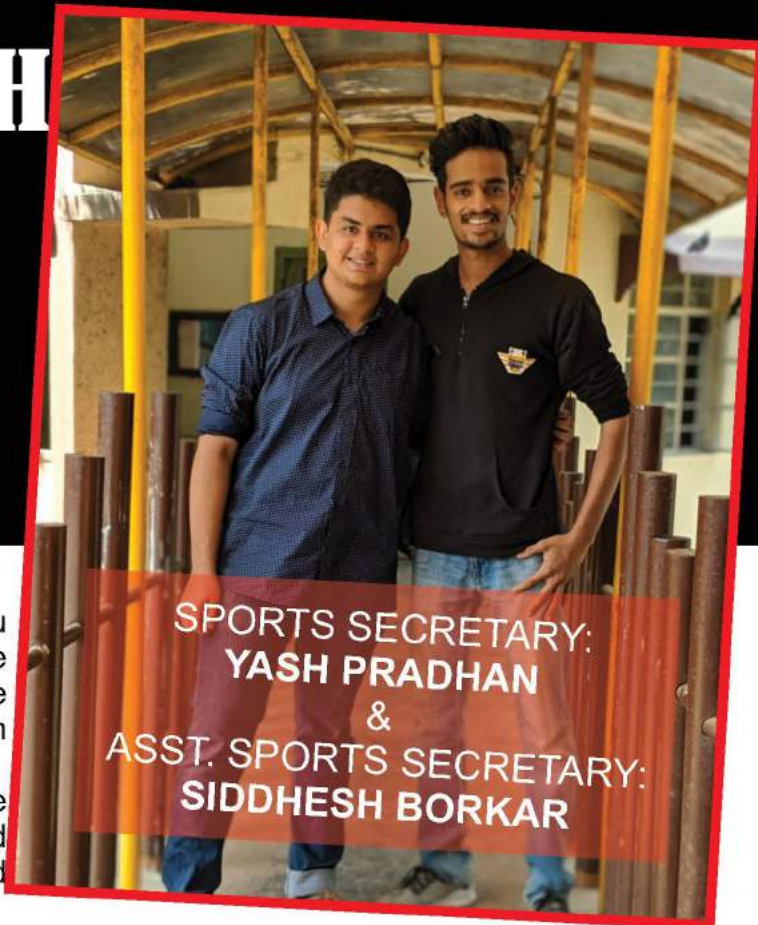
TS: For the first time third year students were the part of the Student Council. From understanding our responsibilities and learning the process while carrying out our studies, it was all very new to us. But no doubt we had our teachers, office staff and seniors helping us out. As the fest was early, marketing and publicity were our main areas of concern. The fest being in January we had to start our preparations directly after our exams got over. Most other colleges schedule a holiday period for such preparations but our team did not step back and we faced every challenge with utmost dedication and hardwork. The fest throughout has been a rollercoaster ride but enjoying the fruit when you have worked hard for it adds more taste to it.

ATS: The biggest challenge for us was publicity and marketing along with the preparation of the fest in a short span of about two weeks from the day of reopening of our college which before used to be about four weeks. I think everyone had put in their best effort to complete their tasks which led to the grand success of our beloved Spandan.



TECHNICAL SECRETARY:
JAYESH JAIN
&
ASST. TECHNICAL SECRETARY:
SHUBHAM MAURYA

INTERVIEW WITH THE SPORTS SECRETARIES 2019



Why did you decide to stand for the post of SS?

SS: Serving on your college student council gives you a say in student activities and a voice with the college administration. It is something I have dreamt of since my first year. Recognition of this service looks good on the college applications as well.

Also, being a sports person already I know the importance of sports in lives of students and especially today when people choose to be lousy and play indoor games.

Being a sports secretary has given me an opportunity to participate actively.

ASS: Sports has always played an important part in my life and for me Sparx is one of the most exciting periods in our college. So, when I had the chance to apply for the post of Asst. Sports Secretary and be a part in organising the events, I didn't think twice.

How was Sparx this year?

SS: Sparx 2018 has been an enormous success. We were successful in getting the active participation of everyone, from the First years to Fourth years. Also, the spirit of sports was always maintained and all the competitions were played in a friendly spirit.

Lastly, I take pride to point this out that the whole Sparx team has been supportive enough and without them it would be impossible to achieve what we did. Working with them has been more than just an incident; it has been an experience.

Sparx 2018 has been a very satisfying journey for me personally.

ASS: This year's Sparx was really fun, exciting and a very competitive event with a lot of participation from the students.

Why is an event like Sparx needed?

SS: An Event like Sparx is needed because physical exercise is good not only for the mind but also for the body and spirit. Furthermore, team sports are good for learning accountability, dedication, and leadership, among many other qualities.

An event like Sparx not only upholds the sportsman spirit in students but also teamwork and friendly rivalries. It helps to get the active involvement of everybody from freshmen to seniors.

Lastly, I believe Sport does not just build character. It reveals your inner self to others.

ASS: Well, Sparx gives us a break from our normal routine to compete as a team for the class and brings a sense of unity among the class. A sports event like this is necessary to create a friendly atmosphere and to enable students from various branches and years to work and know each other more.

How many new events were there from last year/ the change as compared to last year?

SS: SPARX 2018 has fostered a whole different enthusiasm than that of the previous years.

I am justly proud to say that we introduced STARX: Staff +Sparx this year. I looked to involving the teaching and non-teaching staff members so that they would actively participate in the sports activities and feel an enormous enthusiasm. And fortunately, everybody enjoyed it to the full as well. Also, introducing Badminton was quite a new addition in this year's Sparx.

ASS: Unlike the separate events for the regular teaching and non-teaching staff teams in the events of Sparx, we decided to organise an event where all the teachers and staff take part. We called it called STARX(TEACHERS + STAFF), so that more of our teachers and staff could participate in the event and experience the fun and excitement of Sparx.

INTERVIEW WITH THE GENERAL SECRETARY 2019

GS is the highest obtainable position, does the responsibility intimidate or empower you?

GS: I feel the answer to this question is in the question itself, because at the initial stages this position does intimidate you since this is the first time the Third Years are selected as a part of the Student Council and at some point some decisions make you wonder if you are taking the right step. Decisions cannot be taken in haste; any human being would have a fear of going wrong after obtaining such a responsible post.

This decision-making process just takes you forward to the point when you don't even realise that the intimidation has turned into empowerment. As mentioned in my speech for the council election, "The greatest purpose of power is to Empower"; with this what I meant was, if you yourself are not strong enough to make decisions or to help others out, you cannot expect the people around you to make decisions. So even if I felt that there were some miscommunications or issues, you yourself need to understand all the issues first and then later solve the issues along with others with a composed mind.

What challenge did having the fest so early, in this year, have?

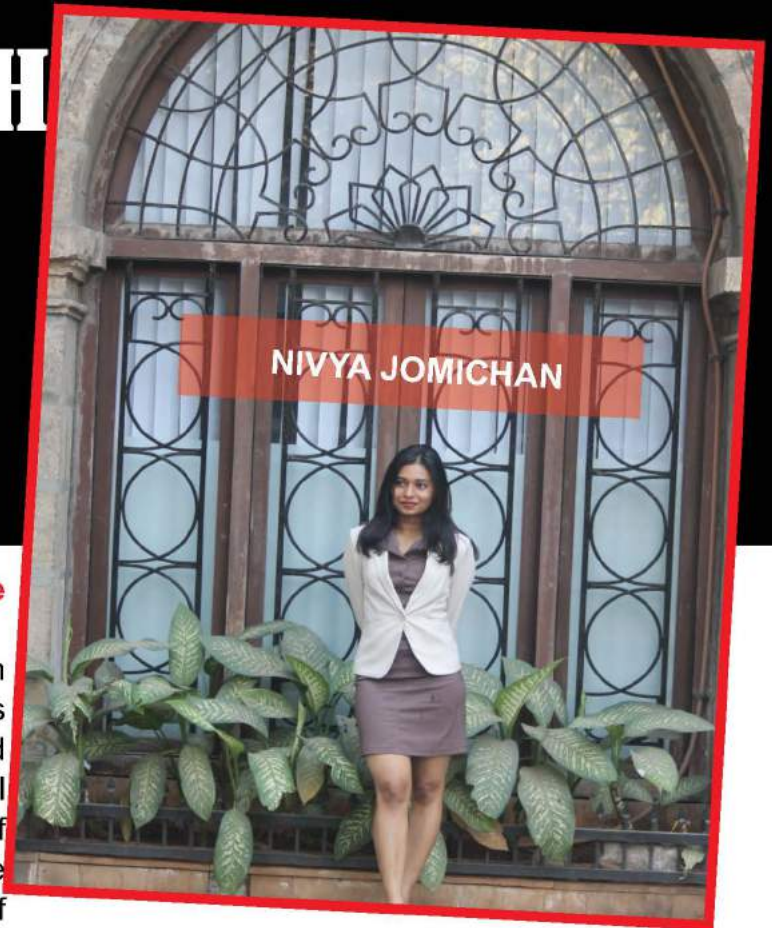
GS: Firstly, many people were sceptical about the fest being so early. But what you cannot change is the fact that this decision is made by the college administration and I am sure they made this decision after considering all the factors, and for the welfare of the students. Talking about the benefits we got from this decision of having the fest early, we worked full days for the fest since we didn't have lectures. Previously we used to have a half day of lectures and the fest work/activities after that. Because of this help from the college attendance was not at all an issue this year. Talking about the major note worthy issues, Marketing and Publicity, much was shared about their significance. Marketing was highly appreciated by the college administration and we had a great footfall this year for the fest as well, so actually the note worthy issues were not a problem anymore right up till the end of the fest. We did not face any other issues/problems as such apart from the usual ones that are faced during the fest every year.

For a future GS, what qualities/experience does a person need to have to be one?

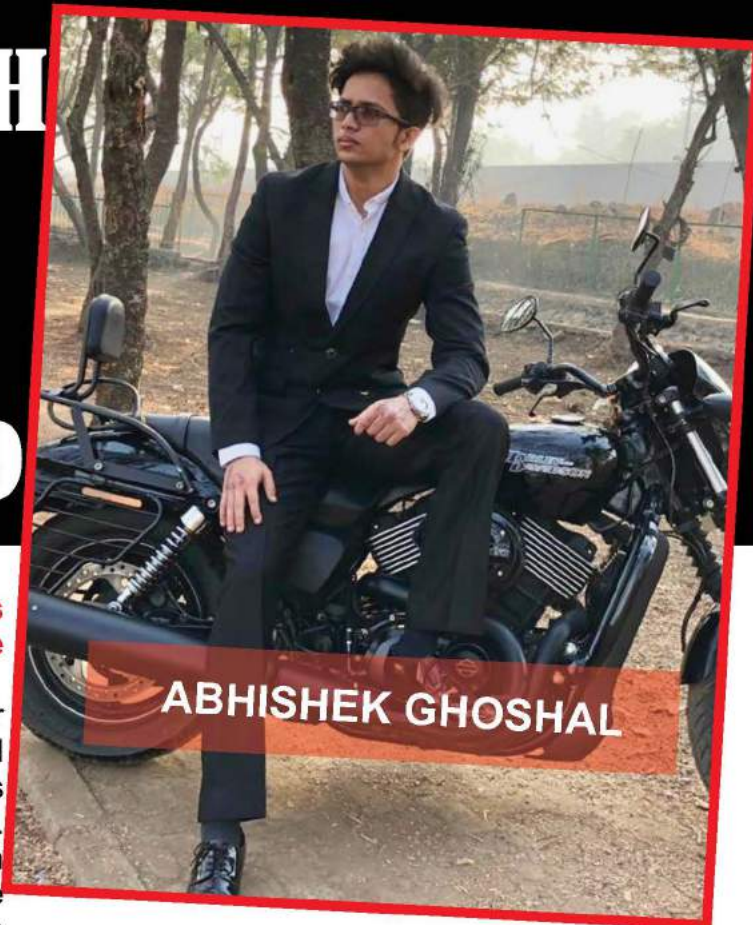
GS: First of all, the person should have a good rapport with the students as well as the teachers, so that if there is something anyone wants to share with you, he/she shouldn't feel uncomfortable sharing it with you. You need to create a very friendly atmosphere around you. People should be able to communicate with you even for the tiniest of problems, even if it is merely about a printer or a fan. The GS basically bridges the gap between the students and the teachers.

Being the GS, you need to make sure beforehand that all the events will commence and end at the determined time, are well organised, well managed and have enough people handling the event.

A very important duty is assigning the right job to the right person. You need to keep a tab on what work you have assigned to which person and ask people if they need any kind of help. You need to set boundaries and limitations for your work and complete each task efficiently. Your overall attention to all the activities is a must for the smooth functioning of even the smallest of events. Lastly, I am very grateful to the college administration that they found me worthy enough of this position and it indeed helped me grow as a person as well.



INTERVIEW WITH THE ASSISTANT GENERAL SECRETARY 2019



AGS is one of the most responsible positions given to anyone after the GS, so does the responsibility intimidate you or empower you?

AGS: Firstly, I'd like to thank all the teachers for electing me as the Assistant General Secretary and giving me the opportunity to perform my duties towards the college as a part of the Student Council. Coming back to the question, I feel I was both intimidated and empowered by the gravity of the position. I was intimidated by the demanding tasks that lay ahead and also the fact that I did not have a predecessor to look up to since there was no such post as "AGS" in the past council. However, this was also the reason why I felt empowered. I had the freedom to forge my own path and claim certain responsibilities as my own.

The council was also a very close-knit group, with each member sharing a unique chemistry with every other member. We functioned as a unit, covering up for each other's shortcomings when needed and heaping praise when deserved. In a lot of ways, we empowered each other, making our bonds stronger

Along with being the AGS you were the Finance head, so how was the experience of handling all the finance work of Spandan?

AGS: Being the finance head requires a lot of dedication and effort. I had to be extremely methodical and meticulous about everything I did. From handling the bills to allocating the budget, everything had to be documented and available when required. All the nuances of every event in each committee had to be known by me in order to maintain some level of reliability.

I really appreciate all the help, the office staff provided me with. They were extremely cooperative before, during and even after Spandan making my work that much easier.

What challenge does having the fest so early, in this year, have?

AGS: Well basically having the fest earlier means having less time for everything; less time to get the required permissions, less time for the marketing team, less time for publicity and so on. However, we couldn't compromise on the quality of work we did. If any of the teams hadn't put in the amount of effort that they did, Spandan wouldn't have been as big a success that it was. Even though everyone knew that we were constantly pressed for time, none of us showed that tension on our faces. Every set back was taken in our stride and handled with grace. Spandan required a real team effort and I'd like to thank all the people behind the scenes that made it possible.

MESSAGE FROM MR. & MS. XAVIER 2018

It all started when a few of our seniors came to my class to take auditions. I was still thinking, 'what should I do?', 'should I escape from this auditions?', these were the thoughts coming to my mind. Finally I decided to give it a try, because this opportunity was not going to come again.

There I started with my auditions and surprisingly I was selected for the next round. This process went on and on. In each round I sang songs in different languages. Day by day my confidence started building up.

After clearing four rounds, I had reached the final round. I was a little curious, a little anxious but I was in finals of Persona 2018. After a while, it was my turn to perform. I sang the victorious song 'Duma Dum Mast Kalandar' and I could see the audience singing along with me, my friends cheering for me up, and reassuring claps were audible to me. Now, the results were about to be announced. The butterflies in my stomach couldn't settle. I heard a voice announcing, 'Ms.Xavier 2018 is contestant number 11' and I realized it was me. Words cannot express my reaction, and the happiness on my face was immense. I walked ahead with a huge smile, was crowned and given the title of 'Ms.Xavier'.

This contest made me more confident about my personality, more creative with my thoughts. Challenging my limits turned out to be a good idea. Those two weeks for organizing the rounds till the final round was reached were totally filled with fun, jokes, laughter and what not. It was a beautiful journey with amazing people.

We didn't realize we were making memories, we just knew we were having fun.

Always remember,

'Don't watch the clock. Do what it does, keep going.'

**-Nidhi Kakde
Ms.Xavier 2018**



The initial days at XIE were full of fun. I then I heard about the competition of "Persona", I was anxious to know more about it and especially who would take part in it. I wanted to show my developing skill on a guitar.

With the help of some seniors I came to know about persona and was thrilled, knowing that the winner would be given the title of Mr. Xavier. I felt motivated and eagerly waited for the first round to begin.

Facing a crowd to play the instrument wasn't a problem... I was quite confident about it, but soon I realized, the competition wasn't going to be easy and it shouldn't be taken lightly.

Musicians, singers, dancers, comedians and many more talented people were competing against each other. I buckled up for the future rounds being aware that I needed to improve my playing skills.

The semi-final round was judged by a panel of teachers with a keen eye for perfection. I stammered while delivering my introduction but fortunately that didn't stop me from reaching the final round of Persona.

I was pumped up and excited...the butterflies in my stomach just wouldn't settle. As days passed, the will to win persona increased. When the day had arrived for the finals of competition, all I wanted was to win it and I knew it was not going to be easy. Persona is not just about talent...your walk was judged, your attitude was judged, the way you introduce yourself was judged. On that basis, another amazing guitarist and two phenomenal dancers were considered to be my biggest rivals. I gave my everything that day.

When the result was announced it was I who had won the title of Mr Xavier. The moment was heart stopping and a very happy one.

Persona gave me a great experience. I made some really good friends and the competition did not come in between our friendship. The people, whom I was competing against, are still my friends and I consider myself lucky. I thank my college, the formals committee and all my friends for supporting me and making this happen for me.

**-Ronak Singh
Mr.Xavier 2018**



technical

What do we mean by Machine Learning and Artificial Intelligence?

In recent years, there has been an increase in hype among all the technical communities about "Machine Learning" and "Artificial Intelligence". Even though these terms are emerging in limelight recently, they were discovered long back in the 1950s when **Arthur Samuel** first coined the term Machine Learning while at IBM. Machine Learning is a current application of AI based around the idea that we should really just be able to give machines access to data and let them learn for themselves. Whereas Artificial Intelligence is the broader concept of machines being able to carry out tasks in a way that we would consider "smart". Even though these terms were coined all the way back in 1950s then why exactly are they flourishing now? The primary reason for this is two important things - **Data** and **Computational Power**.

What is the current state of these fields?

The data held by various multinational companies like Google, Apple, Amazon, etc is in abundance. The quality of this data can be used to train our Machine Learning models to be able to make better predictions. Also, as Murphy's Law is holding true to itself, the computational power is increasing exponentially every year. This makes it possible to train models at relatively faster pace.

"AI is the new electricity"

-Andrew Ng (Professor at Stanford and a co-founder of Google

Brain) Rise of electricity transformed everything. Culture, communication, industries, healthcare (it is hard to imagine them running without electricity). Similarly, AI is going to bring reformation in every field out there. Currently AI is being used in many concepts like **Speech Recognition** used by Google Assistant, Amazon Echo, etc. **Facial Recognition** is also being widely adopted in security systems and in some smart phones.

There are various terminologies used in ML such as **Supervised Learning** (mapping input data to appropriate output data), **Unsupervised Learning** (classification of data into clusters which are not labelled), **Reinforcement Learning** (where an agent learns how to behave in a environment by performing actions and seeing the results), etc. **DeepMind's AlphaGo** who won against legendary player **Mr Lee Sedol**, winner of 18 world titles and widely considered to be the greatest player of the past decade in the game of Go uses Reinforcement Learning.

Deep Learning is a branch of ML which replicates the working of neurons in our bodies to create a ML model (ANN - Artificial Neural Network). There are various models of Deep Learning as well which are used in particular sub domains. One such example is **CNN (Convolution Neural Network)** which is widely used in image classification and object detection.

As a consequence, to all the researches and working of AI, all the jobs which are labourious can be easily automated. An example is the job of a security guard keeping an eye on people can be easily replaced by a security camera with facial recognition software.

The repetitive task of data entry has already been automated.

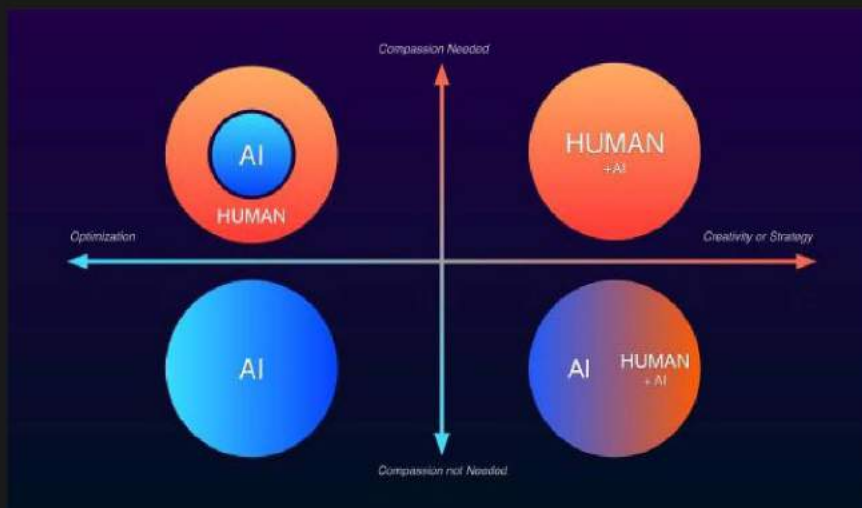
What upgrades are to be expected in the future?

AI has the power to bring reformation like self driving cars to reduce accidents, better health care to diagnose diseases beforehand and treat them thus saving lives, children throughout the globe getting proper quality education to make world a better place overall. The development of AI is to do betterment to mankind. Although the hunger for abundance of quality data and computational power still leaves a gap for more accurate predictions but further down the line, all this can be made possible. Currently AI is developing in specialized fields rather than generalized human intelligence. When we say that a particular organization introduced an efficient self driving car, the only region where AI is used was in Computer Vision. It will take a few more years to evolve AI to a generalized version.

Taking a look at jobs around the world, it is true that most assembly line jobs will be replaced with automation but at the same time it will give rise to many other jobs which will have more sense of feeling and compassion. Kai-Fu Lee (a venture capitalist, technology executive, writer, and an AI expert), in his TED talk presented a graph of how AI can work and coexist with mankind. Humans are differentiated from AI in sense of emotions and feelings. So even if iterative and labourious jobs can be taken over by automation, it will give rise to new creative jobs such as remote tutor, elderly caretaker, social-workers, etc. Also, new jobs which require more emotional intelligence might bloom further down the line.

“AI is serendipity. It is here to liberate us from routine jobs, and it is here to remind us what it is that makes us human.”

- Kai-Fu Lee



-By Siddhesh Shinde
TE IT

BIG DATA

Technology has been rapidly evolving and with the various advancements in the fields of Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT) etc., every aspect of our life is practically being redefined. All these technological advancements along with more and more people gaining access to smart devices and increase in the number of internet-based business organizations, a large amount of data is being generated every day.

What is Big data?

The term big data refers to all the human data, usually in petabytes to exabytes, that are being generated at an unprecedented rate across the globe. Big data can have data that might be structured or unstructured.

Big Data has certain characteristics and hence can be defined using four Vs:

- **Volume**

Big data is characterised by large volumes of data which is the amount of data generated that must be understood to make efficient decisions based on large data. The more data you have, the more valuable it is but the challenge is to reduce large volumes of data and to capture and analyse important data from all the available data to get accurate business results.

- **Variety**

Big data is often captured from a wide variety of sources and in various formats like text, audio, video, numeric and so on and hence understanding the type of big data is important since variety of data worth more and having data diversity

also improves big data's business value.

- **Velocity**

The speed with which the massive amount of data is created, gathered and analysed is the velocity and the faster you can process the data, the more is its worth.

- **Veracity**

Veracity is the extended definition for big data which refers to the data value and the data quality. Also, the data should be from credible sources and it should be reliable and accurate. The higher the quality of data, the more valuable it is.

Thus, Big data can be defined as a business and technology term that describes processes and tools for achieving value from large volumes of data.

Twitter handles about 400 million tweets a day, Google's knowledge of web pages has grown by over 100 trillion in less than four years.

What is Big data analytics?

Big data analytics refers to the processing of big data and the several types of technologies involved to achieve the most value from all the large volumes of data. Big data analytics is typically performed using specialized software tools and applications for data mining, predictive analytics, text analytics, statistical analytics, forecasting and data optimization. Traditional data warehouses based on relational databases are meant for structured data sets. These warehouses are not

able to handle all the processing demands posed by sets of Big data. These sets need to be updated and accessed frequently or continuously, as in case of real-time data, and hence many organizations that collect, process and analyse Big data use NoSQL databases as well as Hadoop and its companion tools including YARN, MapReduce, Spark etc.

understand the needs of individual customers and provide personalized customer service and it also helps in targeting the right customers.

Thus, Big data is required by businesses in planning their online business marketing strategies, providing better customer and relationship management services, increasing their operational efficiency and also in identifying new sources of revenue.



For example, Amazon collects huge amount of customer information which includes customer preferences and purchasing habits and it analyses and uses the properly structured information to market accurately to each customer. Netflix collects the various information about how often and which movies are watched by which category of users and how users rate films.

Netflix then uses this data to predict which films will be preferred by what category of customers and accordingly plans its marketing strategies.

These tools allow processing of massive amounts of unstructured data and help uncover hidden patterns, unknown correlations, customer preferences and other information from all the variety of data sets. Hadoop is a popular software specifically designed to allow distributed processing of large data sets across clusters of computers using simple programming models.

What are the benefits of Big data analytics and why is it required?

Big data includes large amount of unstructured or semi-structured data types and raw data that cannot help businesses in any form. The raw big data gathered from social media, photos, videos, texts and audios need to be analysed to help make better business decisions and improve marketing strategies. Breaking down of big data and analysing it allows businesses to



-By Maitreyee Nath
TE IT

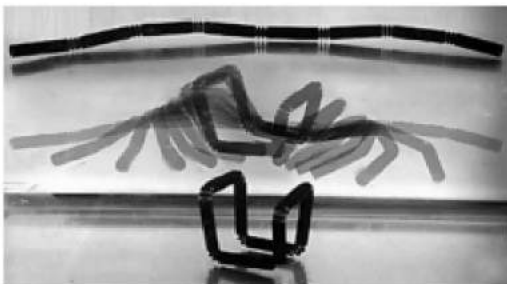


4D printing: 3D printing of smart materials

3D printing or layered manufacturing, by now a well known technology, has been widely used in various industries like Aerospace and defence, automotive, electronics, biomedical and energy applications. Adding one more dimension to 3D printing, using smart materials which can be programmed after printing, a new edge has been given, which is emerging as 4D printing. 4D printing creates three dimensional objects using smart materials or shape morphing materials which respond to their external stimuli and change their shape. These 4D printed object function on geometric code. The code guides the object how to curl, unfold or form specific angles when subjected to external stimuli. These intelligent materials features fibrous polymeric composite materials capable of sensing external command in form of heat, light, electricity, water magnet and other agents. To date, the two main active polymers used are hydrogens and shape memory polymer. This exciting new technology has attracted many industries like tissue engineering, drug delivery, biomedical devices, smart textiles, autonomous robotics etc.

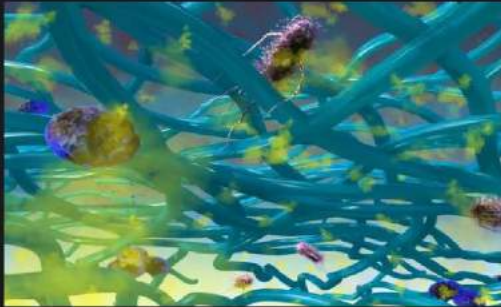
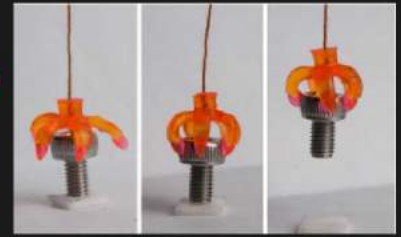
Few are the examples of future 4D printed applications:

1. 4D printed vision next 100 with augmented reality and artificial intelligence Additive manufacturing will combine all of the necessary raw materials-silicon, metal and more into the end product. 4D printing, D printing, more importantly, represents objects that change with time, once they pop off the printed. In the case of the Vision Next 100, BMW imagines the outer shell to transform shape with airflow and wheel arches that flex with steering movement.



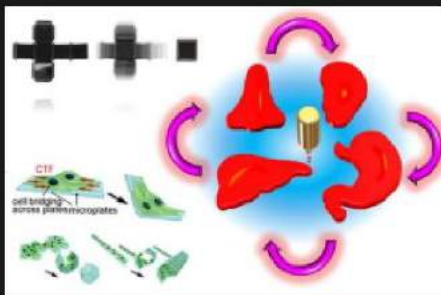
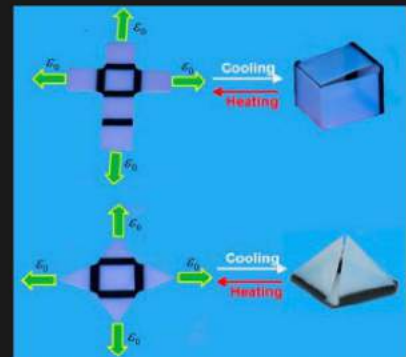
2. A 4D printed single strand self folding into wireframe upon application of energy resources

3. A 4D printed nut holder, which changes shape in response to environmental stimuli



4. 4D printed objects in drug delivery
Customised drug delivery inside the body to have adverse effect of excessive drug.

5. Self folding origami box and pyramid



6. Medical field
Smart and self adjusting materials are used for printing various customised and efficient implants.

Challenges and future outlook

4D printing is a relatively new research area and has a lot of challenges ahead. These challenges are related to technological limitation, material limitation and design limitation or combination of two or more aspects. Another trendy research in AM is 4D bio-printing, though lack of consensus on the exact definition, it has the potential to physically replicate the development path of biology and bring organ printing one step closer to reality. In the future, 4D printing requires technological advances in various fields including software, modelling, mechanics and chemistry.

-By Prof. Prajakta Subhedar



Automation and Artificial Neural Networks

Automation is inevitable be it with the help of robotic hardware or algorithms or any other resources available. The most efficient way proposed is with the help of deep learning. Deep learning is the platform which helps data scientist by providing various resources needed by them to obtain a particular desired result. Some of the features that deep learning offers are experiment analysis; flexible libraries like tensorflow, Pytorch; elastic GPU computation; hyper parameter optimization and neural network modeler.

Artificial Neural Network (ANN) is an information processing paradigm which is used to study the behavior of a complex system and replicate it. It is inspired by the biological way of the processing information by the human brain. The goal of the artificial neural network is to solve any specific problem is the same way as a human brain would. ANN consists of multiple nodes which mimic the biological neurons of a human brain. These nodes interact by taking the data and performing operations on it

and then passing it over to the other connected node in the link.

The neural network is organized in layers namely input, hidden and the output layer. Layers are made up of interconnected nodes. Patterns are presented to the neural network via the 'input layer', which links to one or more 'hidden layers' where the actual processing is done via a system of weighted connections, the hidden layer then links it to an 'output layer'.

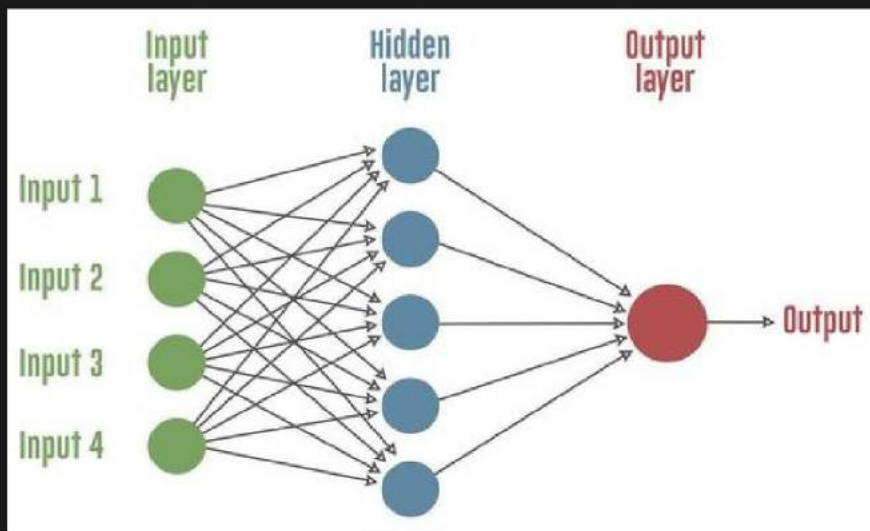
Typically, a neural network is initially trained either through supervised (presence of a teacher, i.e., target projection, parameter constraints, etc) or learning. Training consists of providing the input and telling the network what the desired output should be. The output layer combines all these features and makes a prediction.

There are many powerful neurons available nowadays depending upon the constraints either on the dataset or other parameters. Some neurons which are available are CNN used for images

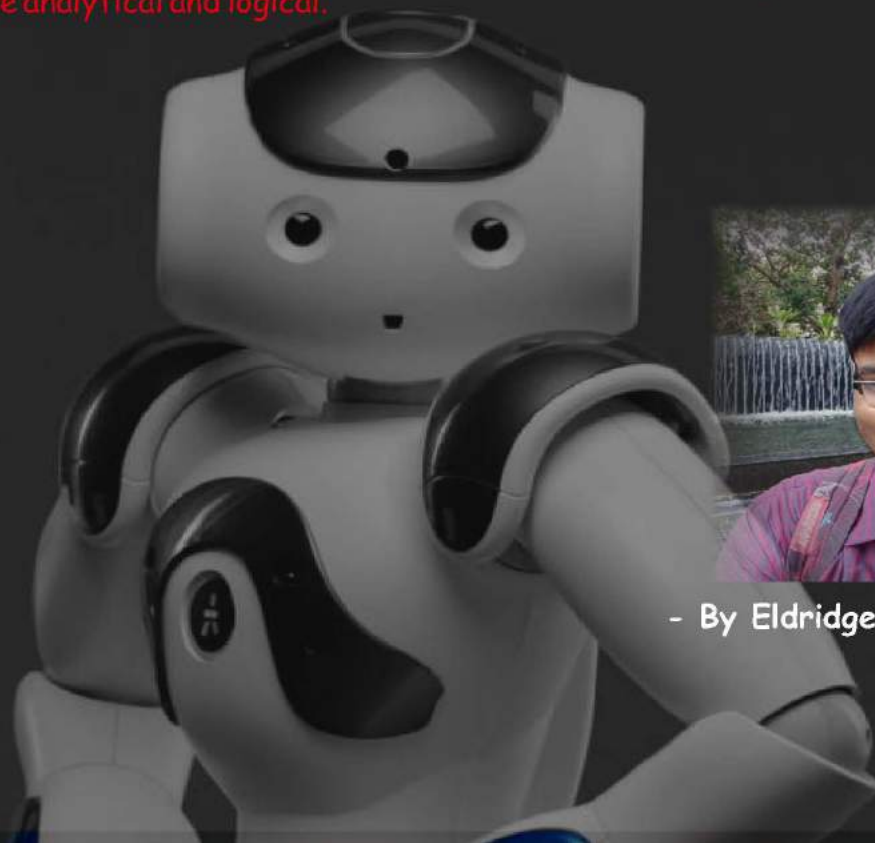
and object detection, ANN for autonomous driving cars, MLP for text detection, etc.

Length of the dataset has always been one of the governing parameters for determining the accuracy of the network but with the new upcoming neurons like one shot learning which can train the network with a small dataset and also deliver promising results has certainly revolutionized the AI world. Machine learning has found its role in various applications right from helping wolves of the Wall Street in stock prediction to creating self driving cars which can help reduce accidents up to 90% (not applicable if you are driving with Salman Bhai) and also various dynamic algorithms which help to control and monetize the company growth and other factors.

Machine learning algorithms can perform a certain task with fixed accuracy and keep delivering consistent results 24/7 and the use of neural networks makes it even more adaptable and flexible to changing parameters. With the growth of machine learning both financially and with the addition of new creative minds is bound to increase the limit in the applications of neural networks in machine learning. Even though the mechanical and



pattern oriented jobs like transportation, weather forecasting, etc can be automated analytical jobs like data security, decentralization, etc seem to have a substantial increase. So it is actually a trade-off in focussing the available time and thinking capacity in doing tasks which are more analytical and logical.



- By Eldridge Fernandes
BE EXTC

Gravitational Waves

“A Wave That Transcends Time.”

Since the dawn of humanity, every new discovery changed and moulded the thinking of human beings. The first-time man discovered fire, he invented new methods of hunting and cooking food. Then, when we peered through one end of the microscope, there was modern medicine. When we turned towards the sky, we had a better idea of the universe we live in. Every new discovery opens new doors to infinite possibilities. Recently, one of the predictions of a great scientist, Albert Einstein was proven right, he predicted the existence of Gravitational Waves. This will enlighten the human race to tremendous new knowledge of the universe.

So, what are gravitational waves? When electrons move or oscillate, we get electromagnetic waves. When particles in the air oscillate (compression and rarefaction) we get sound waves. Similarly, when matter moves, we have gravitational waves. The three dimensions of space and the dimension of time, which is making us old, is known as Space-Time. Imagine Space-Time as an infinite fabric; when a cricket ball is placed on it, the fabric curls around the contact points. The curve would be much more if you place a bowling ball. These bumps and curves created are what we perceive as gravity. When these objects start moving on that fabric, they cause ripples which travel throughout the infinite fabric. These ripples are gravitational waves.

The Laser Interferometer Gravitational-Wave Observatory (LIGO) is a large-scale physics experiment and observatory to detect cosmic gravitational waves. Space-Time expands and contracts at a very small scale (smaller than the size of a proton) and to detect that displacement, we use lasers and mathematics. If distance increases, light will take more time to travel, if it decreases, light will travel quicker. A simple concept with absolute precision gave us proof that will revolutionise the way in which we perceive the working of the world.

Even you and I cause gravitational waves, the magnitude of which will be similar to the attraction of the earth towards an apple. Any object which has some mass can create gravitational waves that travel across the universe. Whatever we do know, will travel across existence in the form of ripples which will one day reach the stars that we once looked up to as kids.



-By Venkatesh Prabu
SE EXTC



SOPHIA RESEARCH REPORT

Research work at Sophia University(Tokyo) was an enriching experience. STEC staffs were very supportive. They assisted me in the office procedures. Prof. Tad Gonsalves being the most supportive host had provided all possible help, facilities and guidance to me. Students of Gonken lab were very hardworking and sincere towards their work.

During my stay at Sophia university, I got opportunity to work on Machine learning concept and apply it on Robocar ZMP 1/10 2016. I had successfully completed the task of moving Robocar on laboratory track. This Robocar navigation on laboratory track was completely autonomous that to without any sensor. Here, I had used only camera input for taking autonomous decision. The deep learning program was trained with high end GPU and then this trained program was instructing the Robocar to move on laboratory tack and follow the traffic signals as well.

After getting these experiments results, I wrote three technical papers. First technical paper is recognized at ICIAS, Singapore. Other two papers are in pipeline for publishing. Overall it was amazing experience to know about Japan (people and culture both). I would love to solve some more Human machine interaction problems with my research in artificial intelligence.

-By Prof. Jaychand Upadhyay



Ray Tracing: The Future of Gaming

The GeForce RTX platform brings together real-time ray tracing, artificial intelligence, and programmable shading for a whole new way to experience games."

- Nvidia

What is Ray Tracing?

Currently, games are rendered (displaying game models onto the screen) by using rasterization, which basically takes a 3D game model and applies its pixel onto your 2D screen, which are then filled with colour. Post Processing of the image is then done by applying textures and shading techniques like anti-aliasing. Ray tracing precisely calculates how light rays hit objects and how a room is lit by an artificial light source or sunlight coming through a window. This makes objects look exactly as they look in the real world. But Ray Tracing is computationally expensive and as such is only used in movies. Rasterization is much faster than Ray tracing, hence its usage in real time gaming.

Nvidia's new GeForce RTX 20 series GPUs are based on the new Turing architecture and feature real-time ray tracing, which provide the best in gaming graphics. Nvidia claims to have achieved 8x faster ray tracing compared to the GTX 1080Ti. Previous attempts at ray tracing by Nvidia showed very little success and still required multiple Titan V cards to run.

Nvidia's new Turing architecture will finally allow Ray tracing to be used in real time gaming. Gaming graphics will now look and feel as awesome as movie special effects! The dedicated RT cores and the new Turing cores are a big part of this evolution. Practically, though, current games will use a mixture of Rasterization and Ray tracing to achieve proper frame rates. Microsoft laid the groundwork of Ray tracing by introducing the DirectX 12 Graphics





A shot of Battlefield V with RTX on, courtesy of EA.

API in Windows 10 that gives game developers much better access to hardware, allowing them to bring out even greater performance.

Next - Generation Gaming

Nvidia has announced that *Metro Exodus*, *Shadow of the Tomb Raider* and *Battlefield V* will include Ray tracing. It has also announced that a few more upcoming games that will support Ray tracing including *Hitman 2*.

Games will now look and feel more realistic than ever, an example is the above shot of *Battlefield V*, which shows reflections of light on water, in game. To all gamers and tech enthusiasts, the future is now!



- By Chayan Khattry
TE IT



English

NIGHTMARE

The sun shined bright on a winter morn
I couldn't believe 'twas already dawn
I was awake yesterday, all day, all night
I was filled with happiness, joy and delight.

I lay on her lap, she ruffled my hair
Her touch was light, with warmth and care
I wished time would stop, right now, like this
I'd give anything to capture this bliss

Suddenly, a storm rushed in
The wind was howling
It started to spin
It ate up a house, a car, a bus
We had to run
Or next, it'd definitely be us
We ran and ran till everything was a blur
You know,
I'd give just about anything to save her

Suddenly some men walked by
Eying her, below and high
So, I gave them a withering look
But they came at us, with knife and hook
I punched and kicked and jabbed and swore
I'd give my life for her, even more

Suddenly a monster came and grabbed her waist
He lifted her and ran
So, I chased and chased.
But he ran too fast
I began to panic
What things he'd do,
Wild and satanic
I just wish I had another chance
I'd do anything, even belly dance

Suddenly the Earth shook and I heard her voice
I was so scared but my heart rejoiced
She woke me up from this nightmarish dream
First thing I saw was her face just gleam
Looking up as I lay on her thighs
She looked down and we locked our eyes
I wished time would stop, right now, like this
I'd give anything to capture this bliss.



**ABHISHEK GHOSHAL
TE COMPS**

CONTROL YOUR EMOTIONS OR ELSE YOUR EMOTIONS WILL CONTROL YOU

The title of my short piece simply means that it's very important to control your emotions because if you don't control them, they will start controlling you. I believe that, for your life to be balanced it is very important for your heart and brain to be well coordinated.

Do you know why I said this? Because I truly believe that the smart buddy sitting in your head, your brain, is actually capable of taking you on a wild roller coaster ride, if it wants to. Whereas your heart will always work emotionally. Also, I believe success in life, success in any area, really comes down to only one factor 'heart'. It is the heart which gives us courage to face the positive and negative situations in life. You will fail, you will suffer setback, you will feel like you want to quit, you will go through things you wouldn't have dreamt of and in those dark moments of life only those who think **EMOTIONALLY** will make it through. So, I mean that it is the heart which gives us courage and determination and it's the brain which shows and chooses the correct path. So it's very important in life to have a balanced life. Emotions are good to be expressed and they make us feel better but they should be controlled and if you control them as a strength along with a calm mind, both will lead you to success in life.



**PRAGATI
MISHRA
TE EXTC**

THE IMMORTAL DEBATE:

BOMBAY



**ARUNDHATI
KAHATE
TE EXTC**

This beautiful island boasts of the equally beautiful Sahyadri Ranges and when the British came to India they were stunned to find this bay. The development was carried out by Britishers and there was a major contribution from the Parsi Merchant Community. The Parsis are still remembered and respected for that contribution. This Group of islands was a strategic business hub for the Portuguese, Arabs and other European traders. Business flourished and so did BOMBAY. The fisherman communities from Kelve-Mahim and Palghar were the richest ones and were equally possessive about their livelihood. They still are. Hence transportation through sea, seafood, trades through sea and the friendly political atmosphere made BOMBAY a safe destination for job seekers and industries mushroomed during the British era. The trend continues till today as people from all the states have a basic preference for doing a trade or job from this strategically located Business hub, which is growing day by day and expanding its area towards neglected parts of Maharashtra like Vidarbha and Konkan.

Bombay's scenic beauty and practical/selfish approval of its people is equally infectious. The sunset or the sunrise are both equally fascinating and demand our affection. The now missing echoing sound of horse hoofs has been replaced by Ola/Uber Taxies but one misses the grandeur of the Ghoda Gadi. Juhu may be clean and neat but minus the Telmalishwala and Bhuttewala. The iconic Double Decker is gone and so many other historical things but Vikas has its share of "Bali" or sacrifices. Maybe after 20 years it may become another Hi-Fi city like Singapore. Till that period...

You cannot shake hands with a
clenched fist,
Whatever begins in anger, ends in
shame.
You can't utter words whose meaning
you twist
And then strut around in the world of
FAME.

Remember, if you have hurt your
neighbour,
And caused her pain,
You must apologise and let peace in
her her reign.
Bury your injuries forgiving all hate.
Live peacefully,
For its never too late.
LET THERE BE PEACE!

Dreaming to me is expanding your
limits,
What we dream of is **LIMITLESS.**
But out of those there is high
possibility,
Of something we want to see come
true.

To be able to dream,
Is like a gift you are able to create.
A whole world put of your imagination,
And one that you can call yours.
There could be anything in it.
It's just yours.
LET THERE BE PEACE!



**SAJJAD
SAYYED
TE EXTC**

ALWAYS WITH YOU



When you are sad, I will dry your tears.
When you are scared, I will ease your fears.

When you are worried, I will give you hope.

If you want to give up, I will help you cope.

I know it's all messed up,
but wait till u hear.

And those thoughts in your mind,
will have a stop.

When you're lost and can't see the light,

I'll be your beacon shining so bright,
this I promise and I'll keep it till the end,

why you may ask??

because you're my Friend!

Treasure is not found on pirate ships,
or in chests of silver and gold,
ain't true treasure the ruby rings,
or jewels from long ago
you don't need to find these beneath
the sea,

because true treasure is simply love
and joy found in you and me.

JUSTIN D'SOUZA
TE COMPS



How many blood groups
are known to you?
A, B, AB, O? Is that all?
Well, aren't you aware of
Catholic, Muslim, and Hindu?

The world is dark,
but is your home safe?
Safety seeps out of the house
when a brother abuses his
sister.
An unwanted touch exploits the
niece.
Then why do you say,
"beware of a stranger"?

What you define a school as?
A place to read books?
In the age of reading
Shakespeare blooms,
they teach us shooting innocent
troops.

Do you trust your neighbour?
He can be a murderer in
disguise.
The dabbawalas can drop
bombs
instead of bread slices.
An attack similar to Peshawar,
can take our lives.

A temple, a place of faith,
Or probably where the babas
tatter your skin apart.
A place to worship god
or where little zainabs
get smashed apart?

A country that pledges of being
brothers and sisters,
witnesses Nirbhaya's pain and
acid games.
Women are always being
shamed.
And every other human is just
treated so lame.

Taking hold of democracy,
we have ripped our souls hard.
Money barks louder than
humanity
and rights have lost their path.

And the irony is you, my dear
friends!
Holding smokes instead of pens.
Makes you set that so called
trend!

You have to set the world on fire,
You light the cigarette.
Your aims and goals,
this addiction makes you forget.

How many more candles?
How many more lives to dust?
How many more dry tears?
How many more blue bloods?

How can you hold your breath to
this?
Doesn't it make you insane?
And is there more need to speak
Too many speechless
performances i've seen.

It boils my blood too.
But the screams have lost its
running.
Dumb is what we feel.
And numb is the only feeling.

I guess they do it for appreciation.
Which their moms never gave.
And are you willing to give them
this entire platform?
Give you more speechless
moments?

Time has stopped what we do.
Time has come to make a
collective effort.
For if either of us don't stand,
the world will refuse to change.
The world will refuse to change.



**KAVITA
SHARMA
FE B**

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ARE WE HEADED TOWARDS A TECHNOLOGICAL UTOPIA OR DYSTOPIA?



After much widespread anticipation that included some technological hiccups, Amazon finally opened the first of their next-gen retail stores called 'Amazon Go' to the public in Seattle, USA in early 2018. The premise behind these hi-tech grocery stores is to reduce those awfully long wait times at the cash registers by just getting all your necessary items quickly and also reducing (read: eliminating) the human labour cost factor of the whole project.

Pretty straightforward right?

Well to the common eye it is but what makes the system workable and increasingly efficient is a combination of Computer Vision, Deep Learning algorithms and Sensor fusion—what Amazon calls Just Walk out Tech; a labyrinth of cameras and sensors present throughout the store that track and detect your every move inside the store. While Amazon has opened just a select few stores to test and analyse the technology, it isn't long before the project will be cost effective enough to be implemented worldwide.

Though while it is a potential step forward, it blatantly ignores some of the less obvious societal issues that will crop up in every corner of the globe as complex technologies like these become more widespread. While it starts with the elimination of low skilled jobs like cashiers, taxi drivers, factory workers and postmen, it won't be long before entry level jobs are a thing of the past. This becomes an issue!

How are we going to address it as a society?

Will there be new jobs to compensate for all the jobs automation will make defunct?

Will it lead to unemployment rates skyrocketing because of the now defunct service industry?

Does this call for the highly advocated concept of Universal Basic Income (UBI)?

These are some serious moral questions that we as a society need to figure out to prevent a dystopia from slowly sprouting.



**ELTON ALPHONSO
TE EXTC**



hindi

समाचार पत्र

समाचार पत्र का आविष्कार सर्वप्रथम इटली में हुआ था। तत्पश्चात अन्य देशों में समाचार पत्र का आविष्कार शुरू हुआ। भारत में समाचार पत्र का प्रकाशन मुगल काल से माना जाता है। हिंदी में 'उदंत मार्तदंड' नामक पहला समाचार पत्र प्रकाशित हुआ था। शनै-शनै भारत में समाचार पत्रों का विकास हुआ और विभिन्न भाषाओं में समाचार पत्र प्रकाशित होने लगे। आज हिन्दुस्तान, जन सत्ता, टाइम्स ऑफ़ इंडिया अपने पूर्ण विकास पर है। ये समाचार पत्र दैनिक, साप्ताहिक, पाक्षिक, अर्धवार्षिक एवं वार्षिक होते हैं। इनका उद्देश्य जाति, धर्म और राष्ट्र का विकास करना होता है।

समाचार पत्रों में साहित्यिक, वैज्ञानिक, आर्थिक, राजनितिक, सांस्कृतिक खोज, सम्बन्ध लेख, कहानियाँ, कविताएँ और मीठी, चटपटी तथा कड़वी सभी प्रकार की सामग्री रहती है। इसके अतिरिक्त देश विदेश के समाचार, नौकरियों के विज्ञापन, विवाहों के विज्ञापन, मृत्यु की सूचना, समारोह की सूचना, खेलों, चलचित्रों और मनोरंजन आदि की जानकारी---- सब कुछ समाचार पत्रों में रहती है। इसलिए समाचार पत्रों का सूक्ष्म अध्ययन करने वाले व्यक्ति सामान्य ज्ञान में कभी पीछे नहीं रहते।

समाचार पत्र मनोरंजन का भी साधन होता है। समाचार पत्रों से व्यापारिक लाभ भी होता है। आयत निर्यात के समाचार अन्तर्राष्ट्रीय व्यापार की वृद्धि में अपना योगदान देते हैं। इससे क्रता-विक्रेता दोनों को ही लाभ होता है।

समाचार पत्र समाज की बुराइयों एवं कुरीतियों को दूर करने में भी सहायक होते हैं। ये समाज में फैली अशिक्षा, दहेज़, बाल विवाह आदि कुप्रथाओं का विरोध करके समाज को जागृत करते हैं। ये देश में व्याप्त भ्रष्टाचार, अनाचार, शोषण और अत्याचार की घटनाओं को प्रकाशित कर असामाजिक तत्वों में भय उत्पन्न करते हैं जिससे अपराध में कमी आती है।

इसप्रकार समाचार पत्र जनता और सरकार के बीच की महत्वपूर्ण कड़ी है। आज के युग में समाचार पत्र महत्वपूर्ण शक्ति स्तम्भ माना जाता है। यह लोकतांत्रिक राष्ट्रों की चार प्रमुख शक्तियों में एक है।

They've done it!

SPACE SUITS were taken from their suits, but this is how they look. The suits were taken from the Moon. The return is a completed landing.

... landed on the Moon. A new era in the history began at 9.18 last night when the lunar module Eagle settled gently on the dusty surface of the Sea of Tranquility.

For their Moon walk, there are still great perils ahead. But these are the great achievements. America, the first men, has opened up a new world.

FULL STORY AND THE PATHFINDER

KULBHUSHAN TIWARI
TE EXTC

जीवन के अनमोल वचन

एक बार की बात है, एक व्यक्ति के चार बेटे थे। उसने अपने चारों बेटों को नाशपाती का वृक्ष देखने के लिए कहा। पहला बेटा उस वृक्ष को देखने के लिए सीत यानि ठंड के मौसम में गया.....दूसरा बेटा उसे देखने के लिए वसंत ऋतु में गया.....तीसरा बेटा उस वृक्ष को देखने के लिए गर्मी के महीने में गया.....और चौथा बेटा उसे देखने के लिए तब गया जब उस पर फल आने लगे थे.....पिता ने चारों बेटों से पूछा की तुमने क्या देखा.....

पहला बोला की "वृक्ष बहुत ही बदसूरत है, ना उसमें फूल हैं ना पत्तों।" दूसरा बेटा बोला, "भैया, आप मजाक कर रहे हैं क्या! वह वृक्ष तो पूरा हरे-भरे पत्तों से भरा था।" तीसरा बेटा बोला, "वह वृक्ष तो बहुत ही प्यारा था और उसकी सुंदरता और खुशबू देखने लायक थी।" चौथा बेटा बोला, "ये सब लोग गलत है, बल्कि जब मैंने देखा तब वह वृक्ष एक सुंदर फल देने वाले वृक्ष के रूप में था। उस पर बहुत ही सुंदर फल लगे हुए थे।

तब उन बच्चों के पिता जी ने कहा की वे सब सही हैं क्योंकि उन सबने उस वृक्ष की बस एक ही ऋतु देखी है और वे उसी मौसम के हिसाब से उसकी अच्छाई और बुराई बता रहे हैं। फिर उन्होंने अपने चारों बच्चों को एक बहुत ही महत्वपूर्ण बात बताई, "उन्हें कभी भी किसी भी वृक्ष को बस एक ऋतु या किसी इंसान की एक तरफ़ा ज़िंदगी देख कर उसकी पूरी ज़िंदगी की काबिलियत का पूर्वानुमान नहीं लगाना चाहिए। हम कभी भी किसी के एक हिस्से को देख कर उसकी काबिलियत नहीं तय कर सकते। हमें अन्त तक रुकना चाहिए।"

इसी के साथ मैं कुछ पंक्तियाँ आप के सामने रख रही हूँ, गौर फरमाइयेगा.....

- मैदान में हारा हुआ इंसान
फिर जीत सकता है
लेकिन
मन से हारा हुआ इंसान
कभी नहीं जीत सकता!!

- चलने वाले पैरों में कितना फर्क होता है !!

एक आगे तो एक पीछे लेकिन न तो आगे वाले को अभिमान होता है और न ही पीछे वाले का अपमान। क्योंकि उन्हें पता होता है कि कुछ ही समय में यह स्थिति बदलने वाली है। इसी को जीवन कहते हैं!

बहुत ही अच्छी और सच्ची बात
परेड में पीछे मुड़ बोलते ही
पहला आदमी आखरी और आखरी आदमी पहले नंबर पर आ जाता है!
जीवन में कभी आगे होने का घमंड
और आखरी होने का गम न करे,
पता नहीं कब ज़िंदगी बोल दे
"पीछे मुड़"

इसलिए जीवन में किसी का मजाक मत उड़ाओ, न जाने कब कौन क्या कर जाए



PRAGATI MISHRA

TE EXTC

जननी

वह है तो हम हैं वह नहीं तो हम नहीं ।
उसके होने से वजूद है मेरा
उसकी तारीफ गुरुर है मेरा।
वो मेरे लिए उस भगवान से ऊपर
एसी इल्लिजा नहीं होगी कहीं पर।
मैंने जिंदगी में बस उसीको पूजा
उसके जैसा नहीं मिला कोई दूजा।
कुदरत की मुझ पर इनायत है
कई जन्मों की तपस्या का वरदान है।

मेरी दुनिया मेरी इबादत मेरी सार्थी
मेरी सबसे अच्छी यार मेरे साथी।
मेरे हर आंसू को अशकों को छोडने से रोका
हर सैलाब को मुझ तक पोहोचने से रोका।
ऐसी परवरिश की हर किसीको ख्वाहिश
पर पूरी हुई सिर्फ मेरी गुज़ारिश।

उनकी खिदमत में मेरी जान हाज़िर है
बस उनकी एक पुकार की देर है।
संसार जिसको माँ के नाम से जानता
अपनी औलाद में जिसका जीवन बस्ता
उसकी ममता का ऐश्वर्य ऐसा
किसी रईस के पास ना हो जैसा।
मेरा मन किसी विधाता को ना मानता
क्योंकि मेरा प्रभु देवता है मेरी माता।



RISHIKA DHANAWADE
TE EXTC

जिंदगी, एक खुली किताब

हर नई सुबह, एक नया इम्तिहान ,
वही लडने का जज्बा ,
और एक नई पहचान,
जिंदगी, एक खुली किताब ।

नये रिश्ते, नये साथी ,
नया पडाव, नया राही ,
पन्ने बदलते ही किताब खत्म नही होती ,
हर पुराना हिसाब खत्म करना पडता है ।
जिंदगी, एक खुली किताब ।

कभी कुछ पन्नो मे दरारें नजर आती है ,
कभी कुछ पंक्तियाँ बहुत सताती है ।
इन पन्नो को पार करना भी है एक इम्तिहान ,
जिंदगी, एक खुली किताब ।

मजबूरी में ना जी बंदे ,
जिंदगी बहुत खूबसुरत है ।
दिल खोलकर हँसकर जीना ,
क्योकि, जिंदगी, एक खुली किताब ।

जिंदगी हमेशा कुछ सिखाती है ,
राह नई दिखलाती है ,
साथी कई मिलेंगे दोस्त ,
पर राह तुझे ही चुननी है ,
ऐसे रंग बिखेर दे पथ पर ,
ताकि देखने वाला भी कहे,
जिंदगी, एक खुली किताब।

ASHWINI BHIMRAO KADAM

TE EXTC



भारत रत्न- अटल बिहारी वाजपेयी

प्रधानमन्त्री श्री अटल बिहारी वाजपेयी देश के एकमात्र ऐसे नेता हैं, जो अपनी पार्टी में ही नहीं, विपक्षी पार्टी में समान रूप से सम्माननीय रहे हैं। उदार, विवेकशील, निडर, सरल-सहज, राजनेता के रूप में जहाँ इनकी छवि अत्यन्त लोकप्रिय रही है, वहीं एक ओजस्वी वक्ता, कवि की संवेदनाओं से भरपूर इनका भावुक हृदय, भारतीय सांस्कृतिक मूल्यों के प्रति आस्थावान इनका व्यक्तित्व सभी को प्रभावित कर जाता है। ये देश के सफल प्रधानमन्त्रियों में से एक हैं। इनकी विलक्षण वाकपटुता को देखकर लोकनायक जयप्रकाश नारायण ने यह कहा कि- "इनके कण्ठ में सरस्वती का वास है।" तो नेहरूजी ने इन्हें "अद्भुत वक्ता की विश्वविख्यात छवि से नवाजा।"

अटल जी के कार्य व विचार:

श्री अटल बिहारी वाजपेयी का सम्पूर्ण जीवन एवं इनके सम्पूर्ण विचार राष्ट्र के लिए समर्पित रहे हैं। राष्ट्रसेवा के लिए इन्होंने गृहस्थ जीवन का विचार तक त्याग दिया। अविवाहित प्रधानमन्त्री के रूप में ये एक ईमानदार, निर्लक्ष्य छवि वाले प्रधानमन्त्री रहे हैं। इन्होंने राजनीति में रहते हुए कभी अपना हित नहीं देखा। प्रजातान्त्रिक मूल्यों में इनकी गहरी आस्था है। हिन्दुत्ववादी होते हुए भी इनकी छवि साम्प्रदायिक न होकर धर्मनिरपेक्ष मानव की रही है। लेखक के रूप में इनकी प्रमुख पुस्तकों में मेरी 51 कविताएं, न्यू डाइमेंशन ऑफ इण्डियाज, फॉरेन पालिसी, फोर डिक्लेड्स इन पार्लियामेंट तथा इनके भाषणों का संग्रह उल्लेखनीय है।

अटल जी के कुछ प्रेरक विचार:

- निरक्षरता का और निर्धनता का बड़ा गहरा संबंध है।
- छोटे मन से कोई बड़ा काम नहीं, टूटे मन से कोई खड़ा नहीं होता।
- कड़ी मेहनत कभी थकान नहीं लाती, वो संतोष लाती है।

प्रधानमंत्री के रूप में अटल जी द्वारा किये गये कार्य :

• भारत को परमाणु शक्ति सम्पन्न राष्ट्र बनाना। अटल सरकार ने ११ और १३ मई १९९८ को पोखरण में पाँच भूमिगत परमाणु परीक्षण विस्फोट करके भारत को परमाणु शक्ति सम्पन्न देश घोषित कर दिया।

एक सौ साल से भी ज्यादा पुराने कावेरी जल विवाद को सुलझाया। संरचनात्मक ढाँचे के लिये कार्यदल, सॉफ्टवेयर विकास के लिये सूचना एवं प्रौद्योगिकी कार्यदल, विद्युतीकरण में गति लाने के लिये केन्द्रीय विद्युत नियामक आयोग आदि का गठन किया। ग्रामीण रोजगार सृजन एवं विदेशों में बसे भारतीय मूल के लोगों के लिये बीमा योजना शुरू की। अटल जी एक लोकप्रिय नेता के साथ ही एक सफल कवि भी थे। वे अक्सर अपने विचारों को कविता के माध्यम से प्रस्तुत किया करते थे। चाहे वह संसद में चल रही बहस हो या कोई मिटींग, वे अपनी बात को बहुत ही खूबसूरती के साथ, शब्दों का प्रयोग बहुत नाप तौलकर करते थे। 2015 में अटल जी को भारत रत्न से सम्मानित किया गया। 2018 में दिल्ली के एम्स अस्पताल में उनका निधन हो गया। ऐसे महान व्यक्तित्व वाले नेता को खोना हमारे लिए बहुत बड़ी राजनीतिक क्षति है। उनकी रचनाओं के माध्यम से वे सदा हमारे बीच जीवित रहेंगे।

ANUJA ANILKUMAR
TE COMPS



Marathi

आयुष्याच्या पाऊलवाटेवर ...

ग्राचुकलीच्या खेळपासून घेऊ कोऱ्या पायीपर्यंत,
सगळेच सुंदर स्वप्नासारखे विरून जाईल,
आजाने येतील नवी, नवी सुरुवात असेल
आयुष्याच्या पाऊलवाटेवर ।

अर्धवट स्वप्न हा बुझा येऊ नसावा,
मनाशी घट्ट बुझा ध्यास असावा,
छत्रासारखे पाणी रोखून अश्रूंची राख होऊदे,
कष्टाचे फळ बुला सदैव गोड मिळूदे,
आयुष्याच्या पाऊलवाटेवर ।

खूप मिळतील हातात हात,
चुकीची संगत धरू नकोस,
जगण्याचा अर्थ लाव
अन् आयुष्याचं सौन कर,
आयुष्याच्या पाऊलवाटेवर ।

शिंपल्यातले मोती पिळवणं कठीण असतं,
तसाच जगण्याचा अडथळास ठेव,
आयुष्याचा सुंदर अर्थ कळेल जेव्हा,
जगणेही सोपे वाटेल तेव्हा,
आयुष्याच्या पाऊलवाटेवर ।

या शरीराची माती होण्याआधी
नाव बुझे होऊदे,
घरलेला मनाशी हात
बुझा ध्यास होऊदे,
फक्त बुझेच नाव उमटू दे
आयुष्याच्या पाऊलवाटेवर ॥

-अश्विनी कदम
TE-EXTC

असा मी अडीच

त्या निस्सर्गाला अरुक पाडणारी अशी तू
त्या किमथेत मुद्दाम फसणारा असा मी
सारा आसमंत बहरवणारी अशी तू
तुला जाणूनही न जाणता
तुला समजूनही न समजता
तुला नेहमी नव्याने ओरुखणारा असा मी
तुझ्या जेठ्यांमध्ये एक शांत सागर दिसतो
त्या सागरकाठी काकजाचे ठोके चुकवत
बसलेला असा मी
हेवाहून जास्त मानतो तुला
पण मंदीराबाहेर शिबूला ताककत
ठेवणारी अशी तू
तो निस्सर्ग अवघा नटावा तुला पाहून
ते कीमेजलेलं फुल फुलाव तुला पाहून
मंत्रमुग्ध करणारी अशी तू
तुला सौजन्यशील म्हणू का?
कारण तू बाहेरूनच नाही तर
आतूनही शुभ्रघवन्त आहेस

-अपूर्व नागप
TE-IT

Calligraphy by Kapil Dongardive

मौकाट

असा हुंका उठू दे साऱ्या फासक्या फुटून
अनिवार प्राण हा कंठीशी दाटून

असा उसकू दे लाका सर्वांग शहरून
अघांग जोर वेदनांचे ओतप्रोत भरून

असा आकांत घुमू दे भारला ऊर फाटून
सैरभैर पशुतरु उभा आसमंत विस्कटून

असे वाहू दे अश्रूंचे पाट जोक्यांतून
जसा पुर यावा सागराला वादळे पिसाटून

अशी बेलगामी मिठी दे मुक्तपणे बिलगून
थेवं शक्ताचे निघोत करकचल्या ओठांतून

असे ऊन पडू दे किरणे प्रीतीची लेवून
तुऱ्यासवे घावेल जीव मग हा 'मौकाट' होऊन!

- कपिल डोंगरदिवे

TE-EXTC

Calligraphy by Kapil Dongardive

बाप

आईचे गुणगान खुप केले
पण बिचाऱ्या बापाने काय केले
बिकट प्रसंगी बापच सदा सोडवी
आपण फक्त गातो आईचीच गोडवी
आईकडे असरील अश्रूंचे पाठ
तर बाप म्हणजे संयमाचा घाट
आठवते जेवण बनवणारी प्रेमक आई
त्या शिंदोरीची सोय मात्र बापच पारी
देवकी यशोदेचं प्रेम मनात साठवा
दोपलीतून बाकास नेणारा वासुदेव आठवा

शमासाठी कौशल्येची झाली असोले कसरत
पुत्रविधीगाने मरण पावला तो दशरथ
काटकसर करून मुलास देतो पॉकेटमनी
स्वतः मात्र वापरतो शर्ट-पॅन्ट जुनी
मुलीला हवे ह्युटीपार्लर नवी साडी
बाप मात्र खरवडतो बिनसावणाची दाढी
वधात आल्यावर मुलं आपल्याच विश्वात मग्न
बापाला मात्र दिसते मुलाचे शिक्षण मुलीचे लग्न
मुलाच्या नोकरीसाठी जिना चढून लागते घाप
मुलीच्या स्थळासाठी उंबरठे झिजवतो तो बाप
जीवनभर मुलांच्या पाठी बापाच्या सहिच्छा
त्याला त्यांनी समजून घ्याव हीच माफक इच्छा

-प्रज्ञा-चक्राण

TE-IT

प्रेम कुणावर करावे?
जो झापल्याला झावडतो त्याच्यावर
की ज्याला झापण झावडतो त्याच्यावर?

प्रेम कुणावर करावे?
मन वेधून घेणाऱ्या गुलाबावर
की त्याला जपणाऱ्या काठ्यांवर?

प्रेम कुणावर करावे?
जन्म घेतलेल्या माधुश्रींवर
की सिध्यासाठी प्राण अर्पण करणाऱ्या जवानांवर?

प्रेम कुणावर करावे?
सुंदर नाजूक वेलींवर
की सिसा आधार देणाऱ्या बुक्षांवर?

प्रेम कुणावर करावे?
रंगीबिरंगी दिसणाऱ्या फुलपाखरांवर
की त्याला बागडण्याची चेतना देणाऱ्या वाऱ्यांवर?

प्रेम कुणावर करावे?
परना भेटलेल्या मुलींवर
की झापल्यावर जीव ओवाळून टाकणाऱ्या
'आई-बडीलांवर'!?

-प्रज्ञा चक्राण
TE-IT

प्रेम
कुणावर करावे?

Calligraphy by Kapil Dongardive



Sketches and Paintings



**ART
FOR ALL**



SAVE WATER
RUTUJA TARALE ,TE COMPS



HORSE
SIDDHESH SHINDE TE IT



MYSTICAL
KAVITA SHARMA ,FE B



LIFE OF A BOAT
Prof . MEGHNA BORATE



SIMPLE GIRL
MADHURI NAIK ,TE IT



PRETTY FACE
PRADNYA CHAUHAN ,TE IT



GOTTEN AND TRUNKS
ABHISHEKH GHOSHAL ,TE COMPS



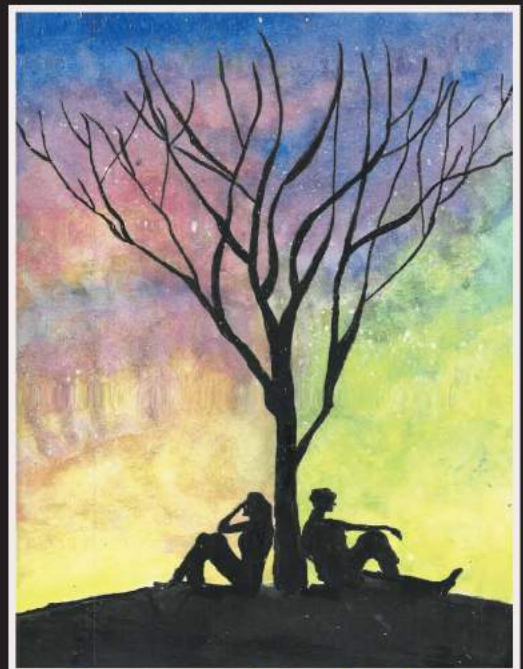
SHIVAJI MAHARAJ
KEVAL MEHER , SE EXTC



TURTLE
MAULI PAWAR FE C



UNIVERSE
DIVYA ANNALDAS ,TE IT



It all started with the stars
PRIM D'SOUZA ,TE COMPS



THUNDER NIGHT
ELTON LEMOS ,TE COMPS



Land of illogic
VENKATESH PRABHU , SE EXTC

The image features a hand holding a pink flower with five petals and a yellow center. The background is a soft-focus sunset with a bright sun low on the horizon, casting a warm glow. In the top-left and bottom-right corners, there are decorative diagonal bars: a black bar above a red bar. The text 'social activities' is centered in a stylized, hand-drawn font.

social activities

Swachh Bharat Abhiyaan

XIE commemorated Mahatma Gandhi's 149th birth anniversary by promoting the campaign of Swachh Bharat Abhiyaan on October 1, 2018 in the institute's premises. The Director, the Principal and the teaching and non-teaching staff participated in this activity.



GREEN CAMPUS DRIVE



On January 3, 2019, the students of XIE participated in the Green Campus drive organized by Prof. Dr. Ashutosh Valavade and Prof. Jaychand Upadhyay. The drive is conducted every year to keep the campus green and clean.



X-RAY:

XAVIER-RAHEJA

AWAKENING

YOUTH

Xavier Institute of Engineering (XIE) and S. L. Raheja Hospital have formed a team to address issues like noise pollution, littering and unsanitary practices in the environment, etc. As a response to these problems, MISSION X-RAY is an initiative taken by XIE and S. L Raheja Hospital to make Mahim and its surroundings a cleaner, greener, healthier and noise-free place. The initiative has two objectives: Pollution Control and Health Care along with the adoption of Mahim Railway Station. Although the initiative is concerned with youth in the main, it reaches out to all sections and age groups of society.



Xavier Outreach Programs

In 2018,
Xavier

Institute conducted
4 outreach programs
by the staff, second
and third year
students.

1 A group of 8 students from SEs (currently in TE) organized an outreach program to Dayanand Nursing College/Hospital, Talasari on 18th and 19th of February 2018 under the guidance of Fr. John.

The objectives of this program was to teach the basics of computers and internet to the Adivasi girls. The computers were donated by our college to the Nursing school.



3 Fifteen student volunteers from XIE organized a two day visit to Talasari in Palghar district on September 1- 2, 2018 to teach English and Computer to the Adivasi girls, who are nursing students, from Dayanand Hospital, Talasari under the leadership of Zalak Pandya from TE EXTC. The student volunteers were divided into groups and the sessions were conducted for 50 girl students.



2 On 17th of August 2018 the students of SE-IT along with Director Fr. John Rose went on a 3 day trip to Manor, a village near Palghar. The trip included 10 students (6 boys and 4 girls) with the guidance of Director Fr. John. On the first day the boys were shuffled into groups from 1st std to 10th std and each group was taken care by the team members. The team members taught them Math and Science and took some interactive sessions. On the second day, a session was organized for the 8th std students regarding health and diseases.





Office bearers/ Organizers



Zalak Pandya



Divya Annaldas



Elton Lemos

4 Mr. Rimson Saviour Nadar from the Department of Information Technology and Mr. Ajit Dhanawade from the Department of Computer Engineering volunteered for a three day session as a part of the Xavier's Outreach Program at Loyola Secondary High School, Dahanu during November 20-23, 2018. The nature of these sessions was to teach the basic fundamentals about computer (hardware & software) and using the internet, to the Standard X students. The session benefited 80 students. Moreover, the condition of the present machines in the computer lab of the school was checked by Mr. Rimson and Mr. Ajit. For the students to understand well, the sessions were conducted in Marathi and Hindi. This outreach program gave the students an experience to learn computers for the very first time.

XIE AT MAGIS

SOUTH ASIA 2019



This year, I was asked to represent XIE at Magis South Asia 2019. Around 850 youngsters from all over India and a few even from Nepal gathered for this event, to witness and to be enlightened about the potential that youth have today to change the world. This event was held in Bangalore from the 11th—14th January 2019. Besides making over a hundred new friends and engaging in other fun activities, this event had a deep impact on my life. So, I would like to shed some light on the things that happened at the event and the message that I carry from it.



Firstly, what does the word Magis mean?

It is not another fancy name given to an event. It has a very profound meaning. Magis is a Latin derived word meaning more or greater. It basically means that one can break all barriers and achieve things that the world claims to be beyond one's limits. Therefore, no matter how good you are, the good can always become better and the better and so on. The intuition concerning Magis is that one cannot say that he/she has attained the state of perfection because the superlative state is not practically achievable; there is always room for more. Therefore, one must always aim higher and always try to improve on the past. Magis demands that a person should never settle for less.

Chris Lowney in his book "Heroic Leadership: Best Practices from a 450-Year-Old Company That Changed the World" very beautifully explains this Magis principle as follows.

"Magis-driven leadership inevitably leads to heroism. Heroism begins with each person considering, internalizing, and shaping his or her mission. Whether one works within a large organization or alone, no mission is motivating until it is personal. And it is sustainable only when one makes the search for magis a reflexive, daily habit. A magis-driven leader is not content to go through the motions or settle for the status quo but is restlessly inclined to look for something more, something greater. Instead of wishing circumstances were different, magis-driven leaders either make them different or make the most of them. Instead of waiting for golden opportunities, they find the gold in the opportunities at hand."



Celebrating democracy
and
upholding the Constitution

The theme of this year's event was 'Celebrating democracy and upholding the Constitution.'

The guests for the event were the Bollywood actor Prakash Raj, I.P.S. officer Annamalai; musician Benny Prasad, who holds the world record of travelling to all the countries in the world in the short span of six and half years, including Antarctica; Fr. Cedric Prakash S.J., a human rights activist from Ahmadabad; and Umar Khalid, an Indian activist from JNU. These great men, though each from a different perspective, shared a common message of patriotism. Their message is summarised briefly as follows:

We live in a country which happens to be the largest democracy in the world. But do we really understand the true meaning of democracy? Do we actually respect our rights and fulfil the duties? Or rather the real question is, do we citizens even know our rights and duties? The sad reality is that most of us will have to answer the above questions with a 'NO'; and the reason is simple it is because we have never respected our democracy and freedom. How many of us have actually read our constitution or even have a rough idea about the rights we as citizens are called to enjoy? We often say that our country is a victim of religious intolerance, where the minorities are suppressed and other issues, like women being insecure, persist; but often we realise that even fighting against this makes no sense. And this is because we cannot fight for our rights if we don't really know our rights. Therefore, every citizen must know and uphold the constitution. In addition, citizens should not give up their right to vote. Every vote matters. But just voting for a person and then not being concerned about the country's affairs for the next five years makes no sense. One needs to take a stand and fulfil one's responsibilities. The sad reality is that many people have lost their faith in the country. One accuses the other of being corrupt. There are only a few who will to speak up against the wrong. But this isn't true democracy. We define democracy as a government for the people by the people and of the people. Why then are we citizens of the world's largest democracy silent at times when the government treats us as slaves?

Remember always: we can be the change we want to see in our country. And let's not make everybody's responsibility no one's responsibility. We need to take a stand; if our country is worth living in, it is worth dying for.

THE SPIRITUAL EXPERIENCE

All the fun activities and all the work that we were sent out for all revolved around God. No matter which religion you belong to, whatever work one takes up one just has to ask oneself: "Will God tap my shoulders for doing it?"



Grandel D'souza,
(T.E.I.T)

The background features a bokeh effect of out-of-focus light spots in shades of white, grey, and yellow against a dark brown backdrop. Two thick diagonal stripes, one red and one black, cross the page from the top-left to the bottom-right.

extracurricular activities

TEACHING ENGINEERING SUBJECTS USING SKETCHNOTES

By Fr Fabian Barreto, SJ
EXTC Department

“A picture is worth a thousand words” so goes an English idiom. Pictures date back to early Cave paintings. In November 2018, scientists reported the discovery of the oldest known figurative art painting, over 40,000 (perhaps as old as 52,000) years old, of an unknown animal, in the cave of Lubang Jeriji Saléh on the Indonesian island of Borneo [1]. These fascinating cave paintings help me to understand that human beings were wired to be visual thinkers right from the early days of evolution. Fast forward thousands of years and pictures are worth ten thousand words or more. Our modern world is inundated with social media. Mike Rhode’s book “The Sketchnote Handbook” is the seminal work on sketchnoting. He defines sketchnotes as “rich visual notes created from a mix of handwriting, drawings, hand-drawn typography, shapes, and visual elements like arrows, boxes, and lines”. Today we face more complex challenges and visual thinking is emerging as an effective strategy to help us solve them. Visual notes, or sketchnotes, or graphic recording helps us make better decisions faster, communicate them more effectively, and helps teams to execute them better[2]. Sunni Brown who started the doodle revolution explains that we have to be able to distil and synthesize material in order to sketchnote it. We have to be able to understand the relationship between concepts, and it’s not always linear - so drawing is required [3]. According to Sunni “to doodle” is not to waste time or to be distracted. Instead, doodling is a powerful technique people use around the world to help themselves “think” [4]. Yes it helps us to think creatively. Images, colours, patterns, and the kinaesthetic experience of moving a pen across paper activate the right side of our brain; connecting this with words and text generated by our left brain gives us fuller access to our creativity [5]. The tools that one needs for sketchnoting is a pencil, a pen and any paper, even a napkin! As Dan Roam the author of the international bestseller “The Back of the Napkin” will testify. One can also use a digital tablet. Sketchnoting has become popular at tech conferences in the past few years. I was so fascinated by this method that I decided to use it as a teaching aid. The thought of filling up a large paper with hand drawn text and images seemed daunting at first. So I initially made a thumbnail of the content in pencil on an A3 size grid paper. Then I mapped it on a 3 feet by 10 feet drawing paper using different coloured chisel nib markers. It took me a lot of time but the end result was impressive. As I presented it to the students, I observed that they were able to understand the nuances of the topic better and retain the content longer in their mind. Sketchnoting can thus be used to improve the way we communicate our ideas and concepts, enhance the learning abilities of students and spark creativity and collaboration among them.

References

[1] Aubert, M. et al (7 November 2018). “Palaeolithic cave art in Borneo”; Nature. Springer Nature America, Inc. doi:10.1038/s41586-018-0679-9. ISSN 0028-0836

[2] <https://www.autodesk.com/autodesk-university/class/Sketchnotes-Visual-Thinking-Drives-Innovation-2017>

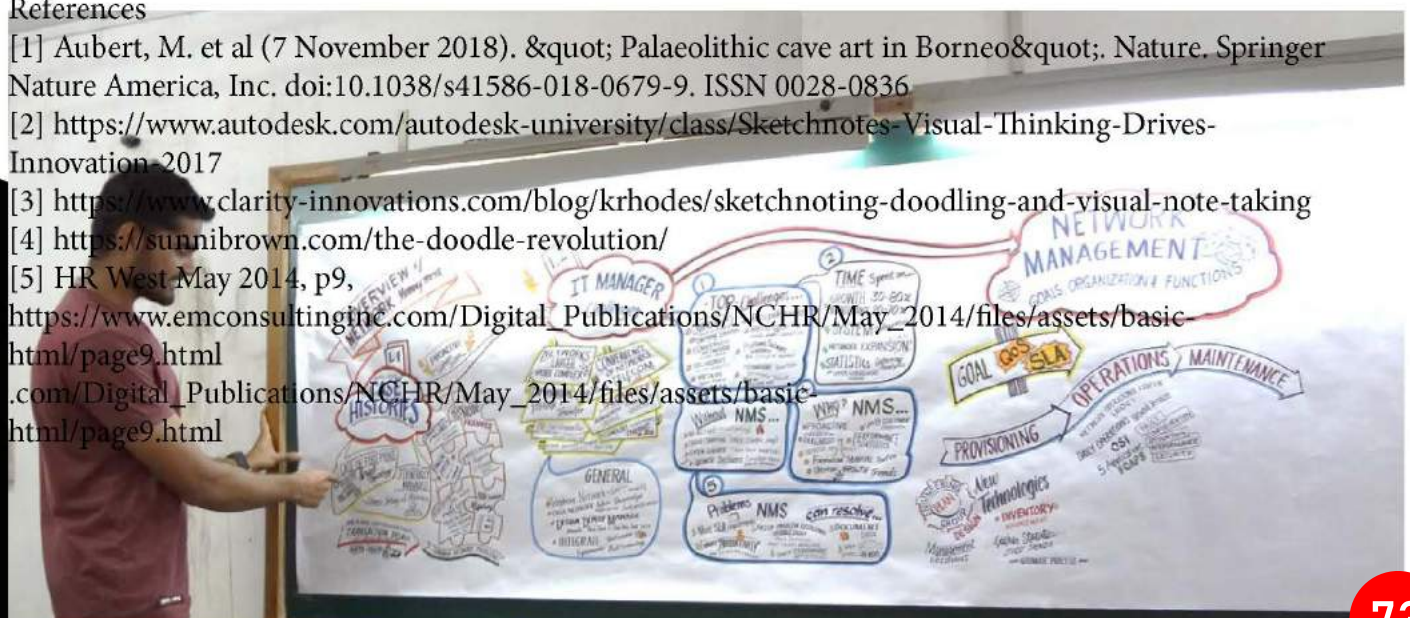
[3] <https://www.clarity-innovations.com/blog/krhodes/sketchnoting-doodling-and-visual-note-taking>

[4] <https://sunnibrown.com/the-doodle-revolution/>

[5] HR West May 2014, p9,

https://www.emconsultinginc.com/Digital_Publications/NCHR/May_2014/files/assets/basic.html/page9.html

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EVS Project Exhibition

A Project Exhibition for EVS was held by the FE students on October 13, 2018, from 8.30-10 AM on “Renewable Energy Sources, Solar Thermal technologies, and Sustainable Development”. It was organized by Dr Ashutosh Valavade in the Applied Physics Lab. The exhibition was declared open by the Director, Fr John Rose, Principal Dr Y D Venkatesh, Fr Fabian Barretto, HoDs of all departments and the faculty members. The students displayed working models of the projects like solar tracker, solar lantern, prototype of the vertical and horizontal wind mill, Arduino based motion detection, raspberry Pi based motion detection, solar distillation, and solar concentrator based water heater. A unique project which got everyone’s attention was the Biodiversity at XIE, displaying the rare collection of birds, insects and flowers at XIE campus.



IoT Project Exhibition



The Department of Information Technology organized a project exhibition on the theme of Internet of Things on 23rd October, 2018. The displayed projects have been designed by the students of TE-IT class. A total of 26 projects were displayed from which the top ten projects were awarded a prize of Rs.1000/- each and for the top five projects, the students received the certificate of winners on October 26, 2018. The remaining projects got a prize of Rs.300/- each.



Web Design Exhibition



The Department of Computer Engineering organized a project exhibition for the subject Web Design on November 5, 2018. The projects by the TE students were displayed in the Web Design Lab and the OS Lab. The project exhibition was organized by Prof. Vijay Jumb and Prof. Kirti Motwani.



The Department of Information Technology organized a project exhibition for the subject Web Development on November 6, 2018. The projects by the TE students were displayed in the IT Labs. The project exhibition was supervised by Prof. Martina D'souza.



Open Mic 6.0



Open Mic 6.0 was organized on the 28th September 2018 in the drawing hall where it was witnessed by a large audience. The participants exhibited their love for music without the fear of competition or the dread of being judged. The evening saw fun jamming sessions lined up with duets, trios, bands and capella. Ryland and Wendell



entertained the crowd with their amazing hosting skills, leaving the crowd in splits with their hilarious jokes. The atmosphere remained alive and crackling with joy, revelry and merry-making as melodies from the current as well as the bygone era were hummed and played. Abhishek Ghoshal impressed the crowd with his piano skills and Ryland Coutinho left everyone awestruck with his drums. The day ended with the group performances of the BE students, trying to get the best out of the day, singing their hearts out amongst fanfare and celebration.



Garba Night



XIE celebrated the festival of Navratri by organizing Garba Nights for the students on October 12, 2018 in the Basketball Court. The event was organized by the Student Council's Cultural Team headed by Mayura Rajadhaksha. The event was observed to be colourful and vibrant where many students showed enthusiasm through their performance. In the midst of stressful submissions and exams, this event created a very festive and cheerful environment on the campus.

Spandan

The image captures a vibrant scene from a college festival. At the top, the word "Spandan" is written in a large, stylized, red font with a hatched texture. Below the title, a group of approximately ten women are performing on a stage. They are dressed in black, long-sleeved outfits with gold-colored necklaces. One woman in the center is being lifted by the others, with her arms raised in a celebratory gesture. The background is dark, punctuated by numerous small, warm white lights that create a festive atmosphere. In the foreground, the back of a person's head and shoulders is visible, looking towards the stage. The overall lighting is a mix of the warm white lights and a reddish glow, likely from stage lighting.

Giving a breather from academics, the college fest season is here. Packed with highly energetic performances, creative themes, celebrations, competitions and more, the annual fiesta of XIE, Spandan brought colour to the campus. All the students who participated in it found it a wonderful opportunity for improving their personality. A part of the fiesta offers a chance to the staff. Spandan remains a cherished opportunity for the staff members to join in the celebrations and competitions actively.



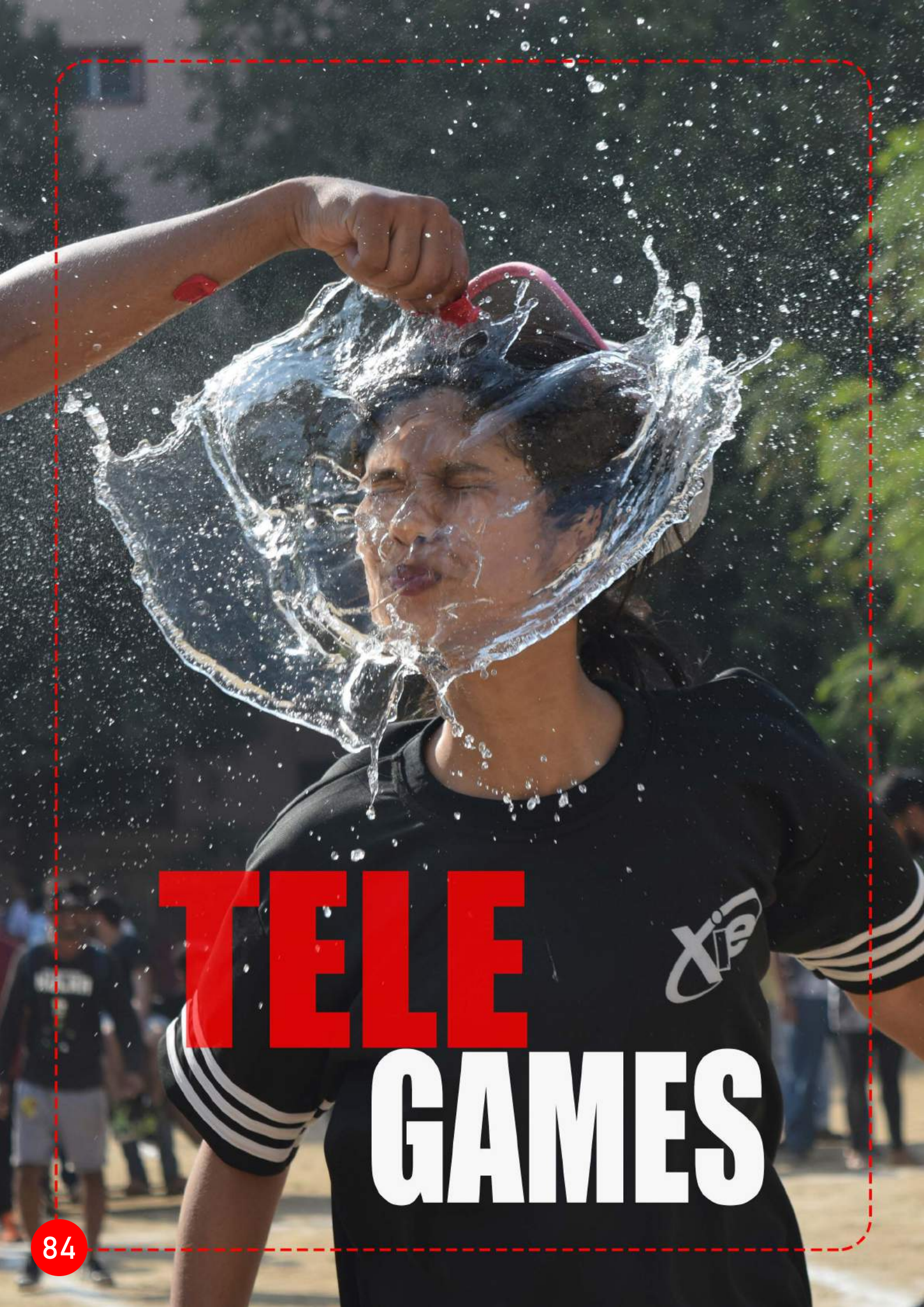
Sparx



Sparx, the annual sports festival of XIE will commenced on Monday, September 24, 2018. The festival is divided into two phases, Phase I for the odd semester and Phase II for the even semester. The Phase I of Sparx has athletics, box cricket, carom, chess, dodge ball, kabaddi, tug of war, open football and rink football (girls).



2018



TELE GAMES



Turn On. Tune In. Start Up.

Inside the Brand New Entrepreneurship Cell at XIE

The Idea

It all started on a lazy Monday morning in class. Struck with ennui and daydreaming, I had one of those “billion dollar ideas” every one of us has every now and then. I turned to Dhruva, who was ducking behind the person in front of him, trying to text discreetly. After sharing with him an idea and a possible business model, we were convinced that we had struck gold, and we decided to do what every bored student or IT employee does - conceive of a start-up. Wasting no time, we bunked our 11AM lab and started working on it right away.

Back to Reality

Over the next few weeks, we worked on it, on and off. The first thing that hit us was that beyond the rose-tinted glasses of the glorified start-up dream, starting an actual business is excruciatingly difficult. There is more to a company than just setting up a website and making a few calls, and expecting the money to roll in. All of this sounds trivial in hindsight, but there was no way to know this in advance. Apart from the difficulty, there was a complete lack of resources. We didn't even have a dedicated place to work; we had to, at times, work from the benches behind the X-Tech building. There was no guidance, mentorship, or networking opportunities where we could have met possible co-founders who might have helped us make the product see the light of day.

Conception

Disillusioned with the reality of starting a company, we put our idea into cold storage for a while to focus on our end-semester and clear our KTs. In the new semester, not being sure if we wanted to continue any more, we decided to go in a different direction. To prevent others from making the same mistakes we did, we thought it would be nice to have a dedicated space in the college for all things concerning entrepreneurship and innovation. We approached Fr. John with the idea of starting an entrepreneurship hub at XIE à la IIT-B. He gave us an enthusiastic response and right away, made some calls, assigned Fr. Fabian as a staff advisor to us, and arranged a nice office on the ground floor of X-Tech.

Introducing the E-Cell

E-Cell was started with the aim of providing students of XIE an outlet for their entrepreneurial and creative pursuits. It is a collaborative space where you can take a break from banalities of college life like assignments and coursework and dedicate yourself to your vision. It is a place where bleeding edge innovation meets entrepreneurial savvy. With the advent of internet and venture capital flowing like water, there has never been a better time to begin a start-up. We expect a stellar response to the initiative and hope many great projects come out of this.



-Ashish Gapat
TE EXTC

TEDx PROGRAM

“Remember to celebrate milestones as you prepare for the road ahead”
-Nelson Mandela

Xavier Institute of Engineering had the chance to once again host its third TEDxXIE event in the voyage to give out the message of “IDEAS WORTH SPREADING”. The theme “Milestone” signified “A chapter of realization bookmarking one’s stand in the quest of achieving the ultimate.” The event curated 6 speakers from distinct backgrounds and fields to share out their ideas.

R Vimlala, IAS officer and CEO at Maharashtra State Rural Livelihoods Mission. She is a strong independent woman who made visions come true for young rural women of Maharashtra by training them to be entrepreneurs with world-wide recognition. Her talk was based on, “My life before and after IAS”.

Samentha Fernandes, is a famous television actress and dancer of the TV show Dil Dosti Dance. She blew the audience away with her talk and idea on “Are you a professional butterfly?”

Shray Rai Tiwari, is an Actor, Model, National level Swimmer and In-House Director at Cafe Counsel. He is a firm believer in Mental Health. His talk highlighted “The Mental illness faced by actors in the film Industry”.

Wyomia Goveya, is a simple woman with a beautiful voice. A professionally trained Music Therapist from Nordoff-Robbins, London, she uses her talent to bring joy, laughter and happiness into the lives of special kids in Mumbai. In her talk, she speaks on how Music Therapy can help us to communicate and how it can also be a medium of love.

Pratheek Sudahakaran, is an architect, an educator and a lifelong learner. He is presently pursuing his Doctoral Research in Architecture for climate change. His talk “A School of Thought” was based on his journey towards becoming a teacher for a change and helping create milestones for his students.

Rishikesh Potdar, is an Engineer and a speed paper-cutting artist, who performed on India Got Talent (Season 5). His talk was based on the live performance of his mind-blowing

The credits for organizing such an awe-inspiring event go to all 25 members of the TEDxXIE 2017 team especially the Licensee & Organizer Maryann Fernandes. The dedication and determined mind-set of the team is what led us to this unleash-inspire.



talent. event go to all especially the Licensee and determined mind-set of the team is what led us to this unleash-inspire.

And many more like

Prize
distribution
ceremony



CHRISTMAS
CELEBRATIONS

C

Bringing Out
the Samachar

Teachers'
Day 2018



XIE SAMACHAR
August 31, 2018

XIE IS PROUD OF Raj Pothl from Computer Department who bagged 9 L package from Cognizant during the Placements in August. Nine students have been placed with different companies with respectable packages. Two Nair from Computers and Tushar Advani from IT have been placed in Cognizant as Software Developers. Aniket Anant Lale, Tanmay Parulkar and Toral Dirachof from Computer Department have been placed by a Software Developer. Congratulations to the students of XIE for these successful placements.

Student from Second Year Engineering along with Dr. John Rose, the Director of XIE, organized a three day visit to Minor (August 17-20, 2018) to teach Maths and Science to the underprivileged children boys and girls, under the leadership of Nidhi and Vidant Prabhu.

Prof. Pranjali Subhadra, Prof. Malharani Parimi and Prof. Pr. Vishnu Barreto conducted extra lectures for the First Year Engineering students in basic electrical engineering and engineering mechanics. These extra sessions provided the students an opportunity to clarify their doubts and obtain practical knowledge of these challenging subjects. The Management appreciates the staff's generosity.

Student Council for the academic year 2018-19 has been elected and installed on August 24, 2018. Its members have assumed the following offices: Nishu Jomchan as general secretary and Manoj as assistant general secretary. Jyeshth Jain as technical secretary, Anshu Kulkarni as cultural secretary and Shreshth Mhatre as sports secretary. Manoj Kulkarni as cultural secretary and Shreshth Mhatre as sports secretary. Tushar Prabhu as sports secretary and Siddhant Bhatkar as assistant sports secretary.

Aleksandar Zecevic who is a Faculty member in Electrical Engineering at Santa Clara University, USA, to conduct a seminar for the students. The topic of the seminar was God as the intersection of science and religion. Faculty members from ACCMII also attended the session.



Photographs



FE A



FE B



FE C



SE COMPS



SE EXTC



SE IT



TE COMPS



TE EXTC



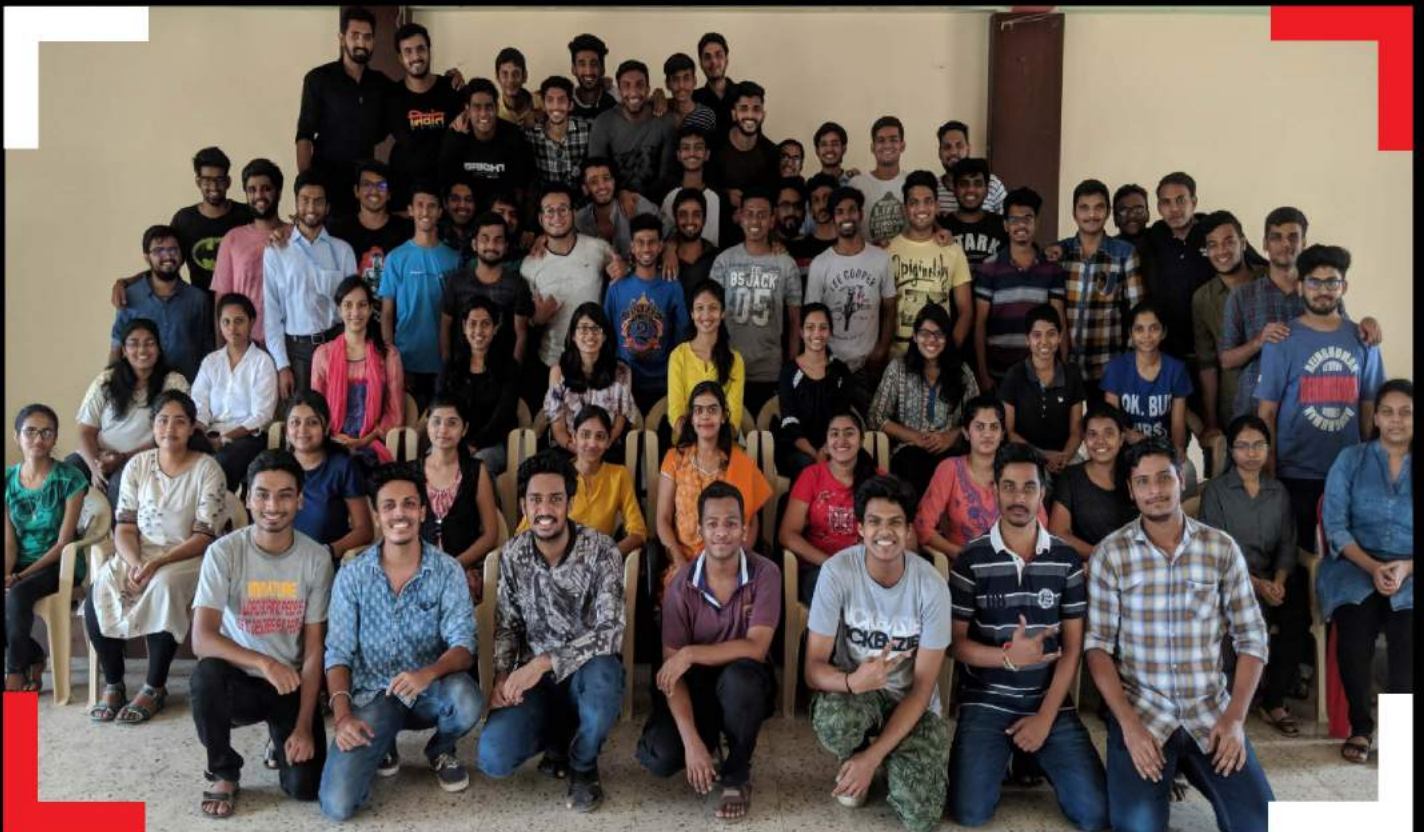
TE IT



BE COMPS



BE EXTC



BE IT



APPLIED SCIENCE & HUMANITIES DEPARTMENT



COMPUTER DEPARTMENT



ELECTRONICS & TELECOMMUNICATION DEPARTMENT



INFORMATION TECHNOLOGY DEPARTMENT



OFFICE STAFF



WORKSHOP DEPARTMENT



HELPING HANDS



TRAINING & PLACEMENT OFFICE



STUDENT COUNCIL



ENTREPRENEURSHIP CELL

GRATITUDE IS THE MEMORY OF THE HEART

As the editor in chief it gives me great pleasure, to thank each and everyone on behalf of the magazine committee who worked hard towards the planning and the making of ConnXIEion 2019 a reality. A special word of thanks to our director Fr. John Rose SJ. and our Principal Dr. Y.D Venkatesh, for providing us the opportunity and a platform to work and be enlightened through the creation of this magazine. Thanks to Fr. Errol D'lima SJ. who gracefully accomplished the challenge of copy editing this magazine. Thanks to Fr. Fabian Barreto SJ. for sharing his insights and being a constant support to us. I also express a deep sense of gratitude to Prof. Meghna Borate for her generous guidance, help, suggestions and support. Thanks to all the Teaching and Non-teaching staff of XIE who willingly cooperated with us and always offered a helping hand if we faced any difficulty. Thanks to my team of Editors and the graphic designers who truly worked hard and would burn the midnight oil to edit and compile this magazine. Here I would like thank Divij Pawar a student from the EXTC department who even though was not a part of the magazine team willingly volunteered to help us with the graphics of the Marathi section. My sincere gratitude to all the people who contributed towards this magazine by sharing their precious ideas. A special word of thanks to all the silent workers who, though not in the spotlight worked really hard towards ConnXIEion 2019. A word of thanks to the readers as well, who I hope will be delighted and enlightened to read this magazine and thus truly make ConnXIEion 2019 a success.

-Grandel D'souza
(Editor in chief)



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