

HIGHLIGHTS OF THIS ISSUE

- Mental Health: Let's Talk
- Special Feature Interviews

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IT | 8.98 CGPA



Bharati Kabra
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EIE | 8.94 CGPA

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From the Editor's Desk ...

Dear Readers,

Hope you are safe during this unprecedented problem which has left us all utterly baffled and improvising for new solutions. The Covid-19 pandemic has made us face the most trying of situations in our lifetime. Precautions against the virus spread has made countries getting locked down for months, maintaining social distance, sanitizing frenziedly and turning homes into office spaces. While fighting this unseen enemy which has not shown any definite reduction even after so long, we have come to understand something quite clearly that human beings are blessed with the resilience to cope with adversities, no matter how tough. We can find alternative ways of existence quickly. While the darkness in the form of Covid 19 engulfed the world, Silicon found innovative ways of recovering its teaching-learning process by taking recourse to online meeting platforms. Other important office work also took to the online mode. We are still devising ways to run vital academic activities such as examinations, online assessments, virtual labs, placement ventures, internships, workshops and seminars in the alternative method, taking utmost safety precautions.

The publication of SLATE during this difficult time may have been delayed but not deterred. Here we bring you reading experience that will take your mind away from the frustrating situation. It is important that we learn to bounce back to normalcy. Our article in the feature “Mental Health: Let's Talk” specifically targets ways of coping with this situation. Do read it to get vital orientation.

As life is slowly getting back to normal after the lockdown, we are fast learning to cope with a situation that is not showing any signs of subsiding soon. The virus may have shaken us completely but it has strengthened our will power to co-exist with a pandemic in the long run.

Do read this volume and post us your comments.

Priyambada Pal
ppal@silicon.ac.in

Arif Mohammed Khan



Picture source: Internet

Former Union minister Arif Mohammed Khan, who is currently the Governor of Kerala, is widely known as a learned man. He was born on 18 November 1951 in Bulandshahr and completed his education from Jamia Millia School, Delhi, Aligarh Muslim University, Aligarh and Shia College, Lucknow University and had started his political career early, back in college, as a student leader. He contested the first legislative assembly election from Siyana Constituency from Bharatiya Kranti Dal but was defeated.

All through his long career in politics, he has worked in parties like the Indian National Congress party, the Janata Dal, Bahujan Samaj Party and Bharatiya Janata Party. He was elected to the Lok Sabha in 1980, 1989, and 1998. During the Janata Dal rule, Khan served as the Union Minister of Civil Aviation and Energy.

Arif Khan has always been vocal about the rights of women and raised his voice on atrocities against women in Muslim Community. He has many times voiced support for jailing those accused of giving Triple Talaq to their wives. Recently, he had also voiced support for the decision to abrogate Article 370 in Jammu and Kashmir and strip the strife-torn state of its special status.

After Khan's appointment as the next Governor of the LDF ruled Kerala, Arif Khan said, "It's an opportunity to serve. I am fortunate to be born in a country like India which is so vast and rich in diversity. It is a great opportunity for me to know this part of India, which forms the boundary of India and is called God's own country."

Along with being a spectacular political leader, he is even a writer by heart. Khan has been deeply involved in writing since his student days. He is the author of the bestselling book of the year 2010 *Text and Context: Quran and Contemporary Challenges*. Now Arif Mohammad Khan is actively involved in writing articles and columns related to Islam and Sufism.

All his life, he has stood for, worked for and supported whatever is true and just and away from corruption. He has supported and worked incredibly hard for the betterment of Muslim wives framing a better world and surrounding for them to live in for.

Neha Mohanty
ECE, 6th Sem.

Deepfake: The Disguised Threat!



Picture source: Internet

“If you are not the customer, then you are the product!” probably every one of us is aware of this reality of our advertised digital market-economy world! Yet the popularity of the internet seems to be sky rocketing like anything the world has ever seen. But did you know how far we are at threat on this “Network of Networks?” Well the world of Cyber Crime is far more deep rooted than most of us could imagine and it is keeping security professionals on their toes 24x7. One such big threat is posed to us by the software named Deepfake.

Deepfake, has been the worst nightmare for many people in the past years. Well you must have heard the old saying that, there are at least seven people in the world who look like you, and Deepfake is exactly what you heard. It can make you 'say, do and be' at places where you never visited or things you never did. This tool that was initially developed for the entertainment industry to ease their work is now being used to target some of the well-known celebrities especially actresses, politicians and influential personalities to defame them. Can this happen to you, a commoner? Yes! All it needs is any of your photos!

So now, do you regret posting the last pic on your social media handle? The Deep-fake is way more powerful than any of us can imagine because it is powered by the future. Artificial Intelligence and our Beloved Machine Learning!! This reminds me of spider man, no I am not lost....well, as he said “With Great Powers Comes Great Responsibilities!”, I have been using this quote quite often now. McAfee the security laboratory at its RSA 2020 seminar showed 8

photos to its audience to guess which one was fake and to the audiences' surprise, more than half of the images were computer generated “Deepfakes” and no one could guess it, not even the experts. That is what you call computer precision! Anyways, there's more to it. Sherin Mathews, senior data scientist for McAfee said, “This technology is so realistic it is actually making people think twice about whether seeing is actually believing.”

To put it to context, Richard Nixon was giving a speech recently which he never gave. Deepfake has taken into its fold President Trump and Tommy Wiseau's. Deepfake videos have essentially been normalized as legitimate online entertainment. Deepfake, as Wikipedia puts it, is a fabricated media where you and I are replaced in our own photos and even videos, with someone else's likeness and this is fueled by AI.

Audio Deepfakes were used when in 2009, a UK based energy firm's CEO was convinced that he was talking to a trusted individual and was made to transfer €220,000 into a Hungarian bank account.

Deepfake is detected by Algorithms which generate it or the likes of it.

Though Deepfake is disguised, it will be exposed like all its kins were!

Sanath Kumar Swain
EEE, 6th Sem.

5G in India



Picture source: Internet

5G technology is a breakthrough, a fifth generation wireless technology for digital cellular networks that began wide deployment in 2019. It is expected to provide at least 40 times faster Internet connections than 4G LTE. 5G is considered to be significantly smarter, faster and efficient than its 3G and 4G predecessors. With a network like this, the possibilities are unfathomable.

The first generation of mobile systems known as 2G/GSM were really focused on massive mobile device communication followed by 3G, the next generation of mobile networks, which enabled mobile broadband, feature phones, and browsing. 4G networks were launched in 2008, popularising smartphones with video consumption, leading to data traffic on mobile networks. All these networks primarily catered to consumers. Now when we look at this next generation of mobile networks, 5G - the fifth generation of wireless networks will allow new innovations to flourish and dramatically change our day-to-day lives; as telecom firms spend billions on current network and new technologies to prepare for the next era of wireless services.

With the data speed expected to be around 10 GBPS, 5G will not only provide rich user experience but also revolutionize the mobility content available online. From being designed for less than 1 millisecond latency or the time the devices take to communicate with wireless networks, to the use of higher frequency bands (30-300 GHz), 5G provides better bandwidth, capacity, scalability and lesser interference.

India is established as a giant in the global mobile industry. Since the launch of mobile services in India in 1995, mobile networks have been an epitome for social and economic transformation. It is believed that India's digital economy has the potential to reach USD

1 trillion by the year 2025 driven by increased proliferation of smart phones, increased internet penetration, growth of mobile broadband, growth of data and social media. 5G is envisaged to be the key catalyst that would fuel this growth.

Mahatma Gandhi once said, "The future depends on what we do in the present." India's future is digital. With India's transformation more inclined towards advanced technologies; LTE is forecast to represent 80 per cent of mobile subscriptions by the end of 2025. 5G subscriptions are expected to become available in 2022 and will represent 11 per cent of mobile subscriptions at the end of 2025, according to technical reports.

5G is about tomorrow, yet we need to solve a number of obstacles we are facing in today's world. Though, 5G technology is believed to solve all radio signal problems and hardships of mobile world, the technology is still facing some problems. Starting from it being highly expensive for mass adoption, 5G is creating a great commotion. Increase of need of manpower, landmass for tower installation, security and privacy issues are yet to be solved.

5G is expected to extend beyond the traditional voice and data services. It is becoming a concerted global effort that will not just connect people but things too. While 5G is built on the successes of 4G networks, it provides an opportunity to move beyond providing connectivity services, to developing rich solutions and services for consumers, industries and infrastructure. Amidst the expectation we are yet to see whether 5G technology gets the breakthrough it is aiming for or it collapses under the weight of digitalization.

Preetika Patra
EEE, 8th Sem.

Manage Your Anger At Workplace



Picture source: Internet

There are 7.8 billion people in this world who go through 10 basic emotions, like joy, excitement, surprise and then there comes 'Anger'. Anger is a natural, adaptive response to threats; it inspires powerful, often aggressive, feelings and behavior. Well, according to Wikipedia, 'A certain amount of anger is necessary for our survival'. But at the same time we have to remember that survival consists of work and there is no place for anger in a productive workplace.

Negative emotions have enormous impact on every workplace. Experiencing negative emotions expressed by others whether seen, heard or read may decrease feelings of overall connection and may affect your work performance. Employees whose managers or immediate coworkers express negative emotions like anger on a daily or weekly basis have much lower levels of engagement and that is why it is important to manage negative emotions. To create good emotional cultures, organizations need to understand which emotions are prevalent in the workplace and how they affect employees. Here Emotional Intelligence (EI) comes into the picture. EI is a powerful concept. It is the difference which makes the difference. A lack of Emotional Intelligence is what limits some people in their ability to manage themselves, manage others or

situations. On the flip side, I have seen people with strong emotional intelligence skills rise above any situation. Quoting John Mayor and Peter Salovey, "The emotionally intelligent person is skilled in four areas : identifying emotions, using emotions, understanding emotions and regulating them".

As with many other aspects of life, emotions are best met with the sense of moderation and logical perspective. Ever met a person who is consistently angry or hostile? They weren't born that way but they allowed certain emotions to stir them from within for so long that they became inbred to feelings arising all too frequently. But we can avoid operating on the wrong types of feelings and master our emotions under the harshest of circumstances by not reacting right away, asking for divine guidance, finding a healthy outlet, by replacing our negative thoughts with positive ones and by forgiving our emotional triggers.

Emotions are a normal and important part of our lives. So, think of happiness, joy, excitement, gratitude and LOVE.

Arpita Pradhan
ECE, 6th Sem.

Renal Transplants in Odisha



Picture source: Internet

On the 4th of February 2020, Khirod Sahoo, who was admitted in a private hospital in Bhubaneswar, received a new lease of life, he became the first person in the state to undergo Cadaveric Transplant. His pair of kidneys had stopped functioning eight months ago but thanks to Priyanka Patra, a 22 year old woman of Ganjam district, who was unfortunately declared brain dead, donated a kidney after her family members decided to do so. Her other kidney was transplanted on a 31 year old woman in SCB Medical College in Cuttack. With this, Odisha became the 18th state in the country to have facility for cadaveric transplantation.

Cadaveric or renal transplantation is the transplant of a kidney into a patient with a last stage kidney failure. Kidney transplants are further classified as genetically related or non-related, depending on whether biological relationship exists between the recipient and the donor. The first ever cadaveric transplant in India took place in the state of Tamil Nadu in 1970s after the state ratified the then prevalent Human Organ Donation Act in 1955. The first attempt to perform this transplant anywhere in the world was in the year 1933 by surgeon Yuriy Vorony in Kherson, Soviet Union but unfortunately his patient died two days later, as the recipient's blood group didn't match with that of the donor's. So it wasn't until 1950 when Rush Tucker of the United States of America received a successful renal transplant; she continued to survive for five more years after the transplant.

The major constraint to organ transplantation between genetically non-identical patients lies in the recipient's immune system, which would treat a transplanted kidney as a foreign body and eventually reject it. Over decades of research led to developments of medications to suppress the non-matchability of

organs but they put an individual at a greater risk of infection and side effects which could even lead to skin cancer. It is worthwhile to mention that, although transplantation represents one of the best examples of scientific achievements, it has also been confronted with ethical challenges. The number of patients desperately needing a transplant far outnumbers the available organs which leads to a lot of competition. The donation of organ also hinges on the consent of the family members and the consent is often shaped by many factors like religious, cultural, ethical and political beliefs.

It is important to note that the benefits of cadaveric transplant are still not available to a very large portion of population. In what could be termed as an astonishing statistics, only 2.5% of the patients with end stage renal disease end up getting a transplant. The numbers in terms of other organs are even more dim. There are only 18 states which have legalised the cadaveric transplant with Odisha being the most recent state which ratified the act in July last year. In the last one month three cases of cadaveric transplants have occurred in the state which is a positive sign.

The state government and bureaucratic system should be involved in an active role to spread awareness on cadaveric transplantations. To boost organ donation, the Government had announced an award in the name of Sukant Sethi who had donated all his organs last year. Cadaveric transplantation not only saves lives of other people but also make your dear ones live even after they have lost their precious lives.

Ashutosh Bijay Mallik
EEE, 6th Sem.

I SRO: Flag Bearer of India's Technological Strength



Picture source: Internet

A country's contribution to science and technology is the measure of its development. If a developing nation wants to create a global image, space exploration is its best bet. The benefits of space research have great relevance for developing countries from revolutionising communications, natural resource management, study of agricultural potential, weather monitoring, to disaster management. Furthermore, the spin-offs from space technology find applications in fields ranging from food storage to open-heart surgery, from fishing to automobiles. This was the thought which led to the birth of a globally renowned organisation called Indian Space and Research Organisation (ISRO).

Every fairy tale has its hero(s), and the story of ISRO is no less than a fairy tale. The story originates from the vision of a great visionary and physicist named Vikram Sarabhai. In a short life he saw a dream of India's Space Program and endeavoured for this scientific cause with great interest. It was not easy task for him to convince Indian government for the relevance of Space Program for such a developing nation. This pursuit of Sarabhai embraced India's space dream and as quoted by former Indian President Dr. A. P. J. Abdul Kalam, "Dream is not what you see in sleep, dream is something which does not let you sleep". With all possible efforts he made the government of the day to resonate for initiatives and provide funding for India's space programme. And thus Sarabhai started to realize India's Space dream.

Indian Space Research Organisation (ISRO) has come a long way since its formation on August 15, 1969. From launching small rockets of just 30-70 kg payloads to carrying 4,000 kg payloads to the outer space, ISRO has much to celebrate when it comes to space achievements. From the days of having a church as the control room, the Bishop's house as office and a

bicycle as ferry and naked eyes to track the smoke plume at Thumba in Kerala and converting a toilet into a satellite data receiving centre in Bengaluru, Indian space odyssey have come a long way to ferrying foreign satellites, launching Moon and Mars Orbiters, and now planning to land on the Moon. The Indian Space Research Organisation has carried out 97 spacecraft missions, 69 launch missions and planned several missions including the Aditya, Gaganyaan and Mars Orbiter Mission.

Every story has its hurdles and ISRO has had its own. The first SLV-3 launch took place on Aug. 10, 1979 with the Rohini satellite. However, just 317 seconds after launch, it crashed into the Bay of Bengal due to a faulty valve. Dr. A. P. J. Abdul Kalam, the project coordinator of the SLV-3 mission when it crashed, had then made a speech on how to handle failure. This was the first setback which ISRO faced but the failed mission set the tone for ISRO's future achievements. ISRO has seen several failures since then, the most recent one being Chandrayaan-2, Vikram Lander deviating from its defined path, minutes before its scheduled soft landing at the Lunar South Pole. These have not made the 17,800 workforce employed at ISRO weak because in science there is no failure, only new lessons. The organisation has a splendid success rate, way better than its compatriots. The cost effective solutions brought forward by ISRO has always left the world in splits. The organisation's work culture is one of the best in the world, so this should be the driving force for the budding engineering minds to join the organisation and showcase the talent by developing indigenous technologies.

Pratik Nayak
ECE, 6th Sem.



Ms. Subhashree Praharaj, 8th sem. IT department is a keen learner and has good knowledge in technical subjects like DBMS and DAA. Currently an intern in Amazon, Subhashree shares her experiences with Sushree Priyadarshini of 6th sem AEI in this interview.

Sushree : Congratulations ma'am for getting into Amazon. How did you prepare yourself for it?

Subhashree : Thank You so much. In answer to your question I would say, I always had my basics clear of what was being taught in college and I always focused on learning the root concepts and fundamentals and not on mugging up things just to get good marks. Apart from that I learned some programming languages and frameworks. I also concentrated on competitive coding, Communication skills and technical subjects like DBMS, DAA etc.

Sushree : How is life at Amazon?

Subhashree : Amazon for me is like a dream come true. It's an employee friendly company, with a great work culture. Here everybody is treated equally whether he/she is a senior or a junior employee or even an intern. Higher management along with the team members is very supportive and friendly. At Amazon we have a team outing and a team lunch in every 3 months. The office is very beautiful and we have a big gaming zone to chill out also. We don't have any time restrictions in office. I am seriously enjoying my internship at Amazon.

Sushree : You are currently a student and at the

same time you're also working. How are you able to manage your time?

Subhashree : Yes, I'm a student and an employee at the same time and am enjoying it and it's not hectic at all. In weekdays I do my office work and in weekends I enjoy my student life. Silicon is so supportive to us that I am able to manage both roles at a time.

Sushree : What do you do in your spare time?

Subhashree : I usually spend my spare time in exploring Amazon's internal tools and documentations, even playing in Amazon's gaming zone and also chilling out with my friends.

Sushree : What are your plans after graduating from this college?

Subhashree : As my internship will end in July, my first goal after graduation is to complete my internship properly and I will work hard to get the PPO so that I can be a full-time employee in Amazon.

Sushree : Any suggestion for our readers?

Subhashree : I would suggest them to focus on competitive coding, their projects and understand the subjects which are being taught by our teachers. Keep learning and all the best for your bright future.

COVID-19: Coping with the Challenge



“It is our attitude at the beginning of a difficult task which, more than anything else, will affect its successful outcome”
— William James

The sudden outbreak of COVID-19 and its far reaching impact on mankind across the globe is unraveling with each passing day. There is a feeling of constant worry, fear, anxiety and stress about the future. During any calamity or catastrophe, one of the first things that get affected adversely is the mental health and well-being. In this trying situation the fear of uncertainty, anxiety, stress, and loneliness has triggered an increase of mental health issues by 40% in India.

In this scenario the mental health of students has drawn the concern of thinkers, educationists and policy makers worldwide. To perform and function well, the prerequisite is sound mental health and students are no exception to this. One has to operate both in the cognitive and the behavioral domains for adaptive coping mechanisms.

Cognitive Domains (Alter negative and stressful thoughts)

- Complete acceptance of the situation is a must. One has to get out of this state of “Denial” by accepting the situation. Then only can one think and work towards facing the challenges.
- Feeling anxious is absolutely fine in this situation. Anxiety to some extent is helpful as it prepares one to face the challenge. But don't just think about anxiety, rather one has to alter the thoughts by some focused positive thoughts.
- Students being away from educational institutes, friends and teachers feel helpless and stressed out. But it is to be remembered that all those involved in the process of teaching-learning are there to help each student. Thus, students must

try to start adapting to the new changed mode of teaching-learning and assessment style. Some flaws will be there as everyone is new to the system, so everyone must be supportive and flexible to the change.

- One has to be hopeful for the future and has to develop the attachment hope, mastery hope, survival hope, spiritual hope gradually. The whole world is fighting this pandemic; nobody should feel that they are the chosen ones for the suffering. Such negative ideas handicap the positive thinking.

Behavioral Domain (Activity based coping)

- Use your cognition for differentiating the myths and facts of COVID-19 and trust valid government source of information.
- To deal with academic requirements, take the help of teachers, faculty advisors and put every effort, without having any irrational assumptions.
- Take the help of social media for community outreach programs and to remain connected with people virtually for support and help.
- Take care of the “SELF”
 - Maintain and stick to a comparatively stable time table (Regularity in eating, sleeping, studying, connecting and helping people).
 - Take care of your own personal space and do respect other's space.
 - Devote some time for your hobbies.
 - Do some exercises.
 - Enroll in new online courses.
 - Be kind to yourself and generous towards others.

In case one finds it difficult to cope, then one must seek help from a mental health professional. Together, with mutual collaboration one can cope with this COVID-19 challenge and safeguard one's mental health and well-being.

Dr. Saswati Jena

Counseling Psychologist

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Dr. S. D. Mahanti is a professor at the Michigan State University, East Lansing, Michigan, USA since 1982. He did his M.S. in 1963 from the University of Allahabad and PhD from the University of California in 1968. He has been a visiting professor to Indian Institute of Science, Bangalore, Tata Institute of Fundamental research, University of Antwerp, Belgium, Jawaharlal Nehru University, Delhi and NISER, Bhubaneswar. He was also a visiting scientist to the Max-Planck-Institute für Festkörperforschung, Stuttgart and Argonne National Laboratory. Dr. Mahanti is a Fellow of the American Physical Society and is also in the Editorial Board of “Survey of Semiconductor Physics”.

During FMET-2020 Ms. Nikita Parira of 6th sem. ECE branch had the privilege to have a conversation with him. *SLATE* brings out the highlights of this conversation for you.

Professor S.D. Mahanti is primarily a theoretical physicist who keeps an interest in understanding materials, their fundamental properties, how they can be applied, their magnetism, superconductivity and thermoelectricity. He has been working towards creating new materials or improving old materials for sustainable development for the past fourteen years.

Currently, he is in collaboration with chemists who synthesise the materials through different physical techniques. About this present work he says, “I also get involved in what they are measuring and how do they understand measurements. So, I start from synthesis, understanding structure properties and I suggest how to improve these materials”.

About sustainability he says, “whatever natural resources we have, we need to gain maximum out of it... We need to utilize the solar energy to the maximum; we need to manufacture materials which help us in using or utilising the solar power. Also it

needs to be cost effective, carbon effective (carbon control), which is a big challenge in future. I am working basically in two areas

- i. Solar powerhouse which will be a very important source in about 50 to 100 years.
- ii. Efficiency of materials”.

Talking about the difference in the exposure that the Indian students get in terms of technology, facilities, and faculty, he says: “It is a challenging question... If we talk about undergraduates (since it is more relevant), graduates are a bit mature, the fundamental difference which I believe is in the way of teaching. Everyone in India wants to pass exams and that is very important for them. In the US, there is a lot more focus on information exchange. Interaction among faculty and students is much stronger there. When there is an honest and intellectual sharing of ideas, questions etc. students are more creative. This is the biggest difference.

Secondly, there is a pressure of exams there also (USA). But they put a lot more focus on research, trying to find out new ideas and showcase their creativity, which is also a fresh change which I see in Indian students these days.

Moreover, students in the USA are far more independent, is what he says.

“Yes, it is. It is a part of their lifestyle. After 18 you are on your own there. Most of the students either take loans and work; so there is more responsibility. If you are paying your own bills, it makes you independent as well as more responsible. Here I don't think there is much scope for work”.

He says, “More youngsters should come to research and become professors and I am always ready to help them with the new ideas, provide any type of resources and help required”.

Open MIC 2.0

Open MIC 2.0 was a literary and musical event conducted by the Meta Academics Cell on 10th January 2020. It was conducted in two rounds. The first round was the screening round where the participants were judged on the basis of their content and presentation. The second round was the final round where the selected participants from the first round had participated. In this round also the judgment was on the basis of their content and presentation. Audience vote was also a criterion to decide the winners. Three winners were decided on the basis of the judge's score and three on the basis of highest vote gainers.

In Judges Category: Subha Snigdha, 3rd year was the Winner and Shweta Santoshi, 3rd year, and Arpita Mohanty, 1st year were 1st & 2nd Runners-Up respectively. In Voting Category Shashank Shekhar, 4th year was Winner and Rinki Kumari, 1st year and Swati, 2nd year were 1st & 2nd Runners-Up respectively.

Two of our Alumni Ms. Aishwarya Patra (2018 passing batch) and Ms. Abhipsa Parichha Pattnaik (2017 passing batch) were the judges.

18th Parents Meet

The 18th Parents Meet was held on 11th January 2020. The Principal, Dr. Jaideep Talukdar delivered the welcome address. The Dean Academics Dr. Debabrata Kar presented the Activities and Achievements of 2019. The Director, Dr. Saroj Kanta Misra initiated discussions on various issues. During this some

parents raised their concerns on conduction of pre-placement training, GATE preparatory classes and quality of canteen food. These were addressed by FICs, Faculty members and trustees present in the meet. Before the start of the meet video clips on parenting and higher education were presented. Seventy-three parents participated in the meet.

CSI Hands on Workshop on Blockchain Technology

A two-day hands-on workshop on Blockchain Technology was organised by CSI-Silicon Student Branch on 11th and 12th January 2020. Mr Prasanth Kumar Sahoo from TCS, Hyderabad was the speaker and instructor for the 12- hour workshop. Out of four sessions, the first session was on Introduction to Blockchain Technology, and its application in Cryptocurrency and other areas like Supply Chain management, preserving land records, health sector data etc. The next three sessions were fully dedicated to programming on Ethereum platform using Solidity programming language for developing and deploying smart contracts. It was a great success with 20 enthusiastic students from B.Tech./MCA from our institute.

Preliminary Level Smart India Hackathon at the Institute

The Smart India Hackathon (SIH) 2020 was announced in December 2019. Unlike the last SIH events, this year the process was different. As a part of the selection process, institutes had to conduct an internal Hackathon to select 7 teams. Silicon conducted its preliminary level Hackathon on 11th January 2020. The selected teams comprised of 5 software teams (including one student innovation) and 2 hardware teams.

MLDSP-2020

The workshop on Machine Learning for Data Science using Python (MLDSP-2020) was conducted from



15th January to 19th January 2020. The workshop was sponsored by TEQIP III and was organized by the Department of Computer Science & Engineering in association with the Department of MCA. The objective of this workshop was to introduce participants to state-of-the-art methods of ML such as Linear Regression, Logistic Regression, Gradient Descent Method, Clustering and applications related to forecasting, Recommended Systems, Text and Speech Analytics, their implementation using Python from a pragmatic and learning-through-doing oriented approach. Ten resource persons from Academia and Industry delivered talks and conducted hands-on sessions during the workshop. There were 149 participants, comprising of 43 faculty members and 76 students from Silicon along with 25 faculty members/researchers and five students from other Institutes.

Annual Athletic Meet



The 13th Annual Athletic Meet was held on 18th January 2020 at Silicon ground. The meet started with inauguration at 8.30 a.m. with an oath taking ceremony by Sports Secretary, Mr. Roshan Sharma along with the participants. After that, the athletic events were started at 9.00 a.m. The different track and field events were smoothly conducted with the help of two external judges from two reputed Institutes under the supervision of FIC Sports, the Sports officer, the sports committee members and all deputed staff

members. Prizes were distributed among winning athletes by different senior staff members. The athletic meet ended at 2.30 p.m.

Cultural Nite-2020



The Campus Coordination Committee (CCC) of Silicon Residence organized its Annual Cultural Event, Cultural Nite-2020 on 18th January at the College premises. There were 50 performances on Dance, Song, Traditional Ramp and Hip-hop. The residents enjoyed each moment of the event.

Staff Award Function



The Staff Award Function of Silicon Institute of Technology, Bhubaneswar was held on 25th January 2020. One Staff member received the 20 years Long Service Award, twenty two staff members received the 15 years Long Service Award and twenty-one staff members received the 10 years Long Service Award. Besides this, eleven faculty members were felicitated for their PhD degrees. Prizes for sports and cultural activities conducted earlier during the year were also distributed. During the program cultural events on Song, Dance and Drama were presented by staff members.

Republic Day Celebration

The Republic Day was celebrated on 26th January 2020. At 9:00 a.m. The Principal Prof. Jaideep Talukdar hoisted the National Flag followed by

National anthem sung by everyone present. Then the Principal addressed the gathering. Sweets were distributed to all at the end of the program.

A Talk on "Industry Readiness"

A talk was delivered on "Industry Readiness" by Mr. Priyatosh Sahu (2019 CSE Passout) on 28th January. Priyatosh has won many National Level Hackathons while studying in Silicon. Many faculty and students attended the programme and interacted with him with great enthusiasm.

Aurabinda Mishra Memorial Quiz



The Silicon Quiz Club organized the Aurabinda Mishra Memorial Quiz every year in the memory of Late. Prof. Aurabinda Mishra. This year, as part of the Silicon Quiz Fest, the "Aurobinda Mishra Memorial Open Quiz 2020" was organized by the Silicon Quiz Club on 1st February, 2020. There were 60 teams, including 18 teams from Silicon, in the prelims round. The final round was conducted by quizmaster Mr. Sanket Tripathy, from XIMB. The winners were Saransh Mohapatra (Infosys) and Mukti Swaroop Pradhan(CET, BBSR). The first runners-up were Adarsh Kumar Mohapatra (AIIMS,BBSR) and Ranjan Anilkumar (AIIMS,BBSR). The second runners-up were Toyad Pattanaik (SIT, BBSR) and Ritwik Tripathy (SIT, BBSR).

The second event of the Silicon Quiz Fest was the FLAMES (Food, Literature, Art, Music, Entertainment and Sports) Quiz conducted by Ritwik Tripathy (Secretary, Silicon Quiz Club) on the 2nd of February, 2020. There were 25 teams (8 teams from Silicon and remaining teams from other colleges and schools in Odisha) in the preliminary round out of which, eight teams reached the finals. The winner was Siddharth Mishra (NMIMS,Mumbai), the first runners-up were Adarsh Kumar Mohapatra (AIIMS, BBSR) and Toyad Pattanaik (SIT, BBSR) and the second runners-up were Tirthatilik Pani (CET, BBSR) and Puranjan Dev (SCB, Cuttack).

Entrepreneurs Fest 2020



The Entrepreneurship Development Cell of Silicon organized the Entrepreneurs Fest 2020 during 1st – 3rd February 2020. In the 1st session of the day two special talks were organized by the Cell. The talks were delivered by two young entrepreneurs of International repute. They were Ashutosh Srivastava, who is an MS from MIT and Bibin Babu, who is one of the most prominent evangelists of Blockchain technology in India. In the second session of day one, a business quiz competition was organized. About 100 students from all over the state participated in the competition and the winners were given the cash prizes of Rs. 15,000.

On the second day, one idea generation competition (Ideathon) was organized by the cell. The students from all over the state participated in this competition. Thirty groups from different parts of the state participated in this competition. Three groups were selected for their innovative ideas. The students were given cash prizes of Rs. 35,000. Bibin Babu and Rashmi Ranjan Sahoo from start-up Odisha helped in organizing the competition. On the third day Silicon Alumni Entrepreneurs were invited to share their experiences and were felicitated on the occasion.

Silicon Football Team Achievement

The Silicon football team bagged the Runners-Up prize at IIT, Bhubaneswar on its Inter College Sports event from 7th to 9th February 2020. The team members were Prince Panda, Rohan Panda, Kumar Aditya, Swagat Raj Nayak, Anwesh Rath, Subrat Kumar Biswal, Aurojit Mishra, Amit Patro, Souvic Dey, Priyadarshan Mohapatra, Yesh Agrawal, Shiba Shankar Panda, Prajwal Maharana, Dharamjit Nayak, Syed Abu Hurera and Sumit Vasant Patil.

Talk by Brahma Kumari Sabitha

Brahma Kumari Sabitha from Prajapita Brahma Kumaries Ishwariya Vishwa Vidyalaya, Mount Abu, delivered two separate talks to students and Staff members on 8th February 2020. She spoke to students



on Career and the Power of Silence. Around 60 students attended the talk. The topic of the talk for staff members was “Anger Management”. Twenty-five staff members attended the talk. The program was coordinated by the Patia centre of Prajapita Brahma Kumaries Ishwariya Vishwa Vidyalaya.

HACK ALL NIGHT by ISTE Students Chapter



The ISTE Students' Chapter of Silicon conducted its annual Tech-O-Meter event this year on the 8th of February 2020. The theme was HACK-ALL-NIGHT with a motive for students to test their limits. There were 35 teams of 129 Participants for software and hardware where Mentors were from the Industry, Academia and Senior Students of the Institute. Santosh Kumar Patro, Aditya Prasad Dhal, Aakash bagged the Winner Cash Prize of Rs. 5000/-. The runners-up were Smriti Nayak, Dhanraj Chowdhary, Satish Sikha Mohanty, Smruti Sikha Mohanty, and received Rs. 3000/- Cash Prize. For Best Innovation, Srijan Paul, Deepshikha Swain, Bikram Kumar Jena, Baibhav Vishal Pani were awarded Rs. 4000/- as Cash Prize.

Workshop on Functional Materials

The Department of BSH organized the 2nd National Workshop on Functional Materials for Emerging Technology (FMET 2020) on 13th-15th February 2020. The workshop was sponsored by TEQIP-III, BPUT. There were 100 participants out of whom 53 participants were from outside Silicon. Ten speakers delivered lectures on different topics related to



Functional Materials. They were Dr. S. D. Mahanti, Michigan State University, USA; Dr. Satchidananda Rath, IIT Bhubaneswar; Dr. Subhankar Bedanta, NISER, Bhubaneswar; Dr. A. Srinivasan, IIT Guwahati; Dr. Debakanta Samal, Institute of Physics, Bhubaneswar; Dr. Debabrata Pradhan, IIT, Kharagpur; Dr. K.K.Chand, Scientist-F, Additional Director, DRDO, Chandipur, Balasore; Dr. Sanjib Das, Scientist, CISR IMMT; Dr. Satya Prakash Sahoo, Institute of Physics, Bhubaneswar and Dr. Enakshi Das, Professor, Silicon Institute of Technology, Sambalpur.

SITMUN



The Meta Academics Cell of Silicon organized the SIT MUN (Model United Nations) on 14th, 15th and 16th February 2020. Colonel D. Swain, Commanding Officer of 120 Infantry Battalion, was the chief guest during the Inaugural Function. He spoke on his experience as a member in the UN Peace Keeping Force in Congo as well as on the role of UN in international peace. There were 150 participants in the program including 30 from other institutes. There were three committees taking up three different agendas for debate such as a nuclear weapon-free planet, the rights of refugees in a global context and the implementation of the Paris Agreement. A total cash prize of Rs 20000/- was awarded to the winners.

Book Exhibition

A book exhibition was organized by the Institute library for two days, 14th & 15th February 2020. Three vendors and one publisher participated in the Exhibition. 3000+ titles were on display in the



exhibition. Faculties, staffs and students were invited to the book exhibition. A tremendous response was received. A total of 510 titles were chosen by the visitors. The list of books chosen at the book exhibition has been prepared and sent to the respective vendors for price quotation. Further decision will be taken for procurement of the books after receiving the price list from the vendors.

Celebration of International Mother Language Day



Silicon observed the International Mother Language Day (Matrubhasha Diwas) on 20th February 2020. The event started with an Odia Song sung by students followed by Poem Recitation, Speeches and Poster Presentation. A total of 27 participants turned up for the event out of which 16 were students and 11 were faculty members. Winners and runners-up (student category) were appreciated with merit certificates and Goodies. Faculty members were also appreciated for their participation. Subha Snigdha was the winner of the Speech Contest as well as the Poem Recitation. Annada Gumansingh and Akash Pandit were the Runners-Up in each category. Dr. Bhagyalaxmi Jena, Annada Gumansingh and Arpita Mohanty were winners of the Poster Presentation. The event was organized by the Meta-Academics Cell.

NWET & AIPEM 2020

The National Workshop on Emerging Technology 2020 (NWET) was organized during 27th February



2020 to 29th February 2020 by the department of Electrical & Electronics Engineering. The theme of this year's workshop was power quality, reliability with safety and security. There were speakers from the Industry & Academia who deliberated on various subjects on the theme. In addition to the 51 students and 15 faculty members from Silicon, 36 industry persons and 6 researchers attended the workshop. Different Industries had their products exhibited during the workshop. The workshop was extended to 1st March (Sunday) with All India Power Engineer's Meet (AIPEM-2020) where around 200 delegates from different industries participated.

Inter College Sports Meet



The 13th Inter College Sports Meet of Silicon was held from 17th to 20th February 2020. There were matches on Basketball, Volleyball and Football. Many Institutes and universities of Odisha like NIST, Trident, Birla Global University, KIIT University, DRIEMS, VSSUT BURLA, CET, Sri Sri University, GITA, SIT Sambalpur, GIET University, CEB, OUAT, SIT Bhubaneswar participated in a friendly environment. Silicon, Bhubaneswar and KIIT University were the Winner and Runners-up respectively both in Volleyball (Boys) and Football (Boys). Sri Sri University and Silicon, Bhubaneswar were the Winners and Runners-up respectively in Basketball (Boys). KIIT University and IIIT

Bhubaneswar were the Winners and Runners-up respectively in Basketball (Girls). Rajveer from Sri Sri University for Basketball (Boys), Hasiman from KIIT for Basketball (Girls), Dinesh from Silicon for Volleyball (Boys), and Abu Hurera from Silicon for Football (Boys) were awarded Player of the Final in each category.

ZYGON 2020



ZYGON, the Annual Cultural Fest of Silicon was held on 22nd, 23rd and 24th February 2020. Teams and individuals performing on the stage went through an audition process. There were songs, dance, fashion show, branch performances and drama. This time there were some external participation in Battle of Band (Bands from other Academic Institutes were invited for a competition) and in Spotlight (a sponsored Rap and Hip-hop competition) which were the attractions in the final evening.

NOESIS-2020

NOESIS-2020, the technical fest of Silicon Institute of Technology was held during 22nd to 24th February, 2020. This Tech-fest always gives a platform to students of different institutes including students from Silicon to showcase their talents in different fields. The regular events were on Robotics, Coding, Circuit Design, Technical quizzes, Idea Generation etc. This year Noesis 2020 came up with new events named as flagship events like Drone Tussle (Robotic Event), and



Talk Show (Motivational and Technical Talk). The fest turned out to be a grand success because of the hearty co-operation of our faculty members, staff members and the organizing student bodies. The technical festival included a dedicated FUNZONE set up in front of the workshop that included events like Face painting, Balloon fighting, Flash Mob, and Tattoo Artist. There were approximately 1300 internal participants and 53 external participants in various events. Total prize money distributed was 1,23,000/-.

Observation of International Women's Day



Silicon observed the International Women's Day on March 14, 2020. The event was graced by Ms. Sagarika Nath, IPS, DCP (Traffic), Police Commissionerate, Bhubaneswar-Cuttack. She addressed the audience, which comprised of students and staff, on the theme of this year's International Women's Day - "Each for Equal": An Equal World is an Enabled World. The essence of her speech was the participation of men enabling women empowerment. Women's empowerment is all about equipping and allowing women to make life-determining decisions through the different problems in society. She shared her personal life experience of cracking UPSC exam in the 4th attempt, thereby highlighting that patience and determination are the key to one's success. She also addressed students' queries on various dilemmas that they face in life and ways to deal with them. She shared few instances of her department's efforts in implementing new traffic regulations in the twin cities of Bhubaneswar and Cuttack, under her jurisdiction and supervision.

Health Check-up Camp

The Staff Welfare Committee of Silicon organized a health check-up camp with the doctors from ENT, Dental and Medicine departments of AMRI Hospital, Bhubaneswar on 3rd March 2020. Many staff members availed the benefit of testing their fitness.



Col. Debadutta Swain, the Commanding Officer of the 120 Infantry Battalion (Territorial Army), Bihar was interviewed by the students of Silicon. Col. Swain was invited to Silicon at the inaugural session of SIT-MUN 2020 and he graced the occasion with his inspiring speech. Sanath Swain, 6th sem EEE and Ankit Das, 2nd sem EEE had the opportunity to hold a conversation with him on the occasion. It was coincidentally the 14th of February 2020, exactly one year after the Pulwama attacks.

On being asked about how it affected the temperament of the country, he says, “Well, the turn of events after the attacks have been very much in favor of India in the international environment. In the way in which India acted, especially the diplomatic initiatives taken by India, were very well thought of and well executed”.

About serving in the UN Peace Keeping Forces, he says, “Serving in the UN Peace keeping mission gives you a lot of exposure to the international forces, the way they function and their thought process. You enrich yourself with a number of experiences which are difficult to learn from inside the country. The more you get exposed, the better you become aware”.

He has also served twice in the Rashtriya Rifles, serving in J&K which surely was a challenging task. Describing his experience there, Col. Swain Says, “It is always a pleasure to serve your country. We work to create an atmosphere of peace and tranquility so that other agencies in the country can work towards the development of the country. I am fortunate that I've had two tenures in the Rashtriya Rifles where I had a lot of exposure to counter terrorism and I did a lot towards bringing peace in those areas”.

Recently with the course of events the role of the

Indian Army or the role of the Indian armed forces is increasing and changing with time, when asked about his views, Col. Swain says, “Armed forces have always been the protector of the society. We have to be dynamic and we have to adapt to the changing scenarios and requirements. Armed Forces are the last option of the nation during any security crisis, so being the last option of the nation, we are there to tackle everything. The requirements are changing, the armed forces are now expected to be a part of the development of the country. We can carry out this initiative in the remotest corners of the country.

In his message to the youngsters he says, “Defense forces is a good career option. It's a career full of dignity and diverse opportunities. Defense forces not only mean picking up a gun and fighting, it has got a lot more to it. There are diverse fields where you can specialize in. You can specialize in communication, aeronautics, become a pilot; you think of anything and it is there. The best thing about defense forces is that it gives you a quality life.

Lastly on a lighter note, Col. Swain shares his experience about serving in a battalion stationed in Bhubaneswar. He says, “As far as the work is concerned it is no different, everywhere it is the same. We have to be committed; and dedicated to the cause. But yes back home it feels good. It is in this land that I grew up. The foundation stone of my life was laid down here. My Alma matter is here i.e. the Sainik School Bhubaneswar and the Ravenshaw University. It feels good to go there; I go there regularly and I interact with the people and it's time to give back to the society. So that way this tenure has been very fruitful where I've been able to do whatever I could for the society I grew up in”.

Recruitment Drives

Inflexi Technologies

Inflexi Technologies, a start-up and e-commerce Solutions provider from STPI, Bhubaneswar, visited Silicon on 8th January 2020 for exclusive recruitment of the 2020 graduating MCAs and made internship-cum-job offers to three MCA students.

Marquee Semiconductor

Marquee Semiconductor, a VLSI Start-up from Silicon Valley with its Design Centre at Bhubaneswar, conducted a pooled campus recruitment drive at Silicon on 18th January 2020. Eligible 2020 graduating ECE, EEE and AEI students from Bhubaneswar based colleges besides Silicon participated in the drive. Silicon had the highest hit-ratio with six winners.

Lecture Notes

Lecture Notes conducted an exclusive internship-cum-recruitment drive at Silicon on 22nd February 2020 for 2020 graduating B.Tech. and MCA students. Eight students (2 each from ECE and CSE while 1 each from AEI, EEE, IT and MCA) were selected.

Capgemini

Capgemini, a global leader in consulting, technology services and digital transformation visited Odisha on 28th February 2020 for a pooled campus drive of the 2020 graduating batch of B.Tech. and MCA students. Amongst the twenty engineering colleges including Silicon who participated in the drive held at ITER, Silicon had the third highest hit-ratio with ten winners (3 from ECE, 2 each from AEI and CSE while 1 each from EEE, IT and MCA).

DXC Technology

DXC Technology, a leading global IT company offering secured, scalable digital IT solutions across differentiated industry domains in public, private and hybrid clouds visited Odisha on 5th March 2020 for a pooled campus drive at KIIT of the 2020 graduating batch B.Tech. students. Silicon had ten winners (3 each from ECE and EEE, 2 from CSE followed by 1 each from AEI and IT).

Trainings, Lectures & Awareness Programmes

Technical Training - InfyTQ 2020 Certification

The Industry Interface Cell co-ordinated a technical training program for the interested 2021 graduating B.Tech. (6th semester) and MCA (2nd semester) students which was conducted at Silicon from 8th to

20th Feb'2020. E-Box, a premiere technical training house at National level, conducted the preparatory training for the participants who appeared for InfyTQ 2020 Certification Exam that included remotely controlled web-proctored on-line Qualifier round followed by proctored on-line Final round and HR interviews.

While the qualifying rounds for the Infosys Certification 2020 (InfyTQ 2020) were conducted on 19th, 21st, 23rd and 25th February, the final round and the HR interviews were on 7th March 2020. Sixteen students from Silicon have appeared the HR interviews for which the results are awaited.

FSS Training Program

The Learning and Development team from Financial Software & Systems (FSS) conducted a two-day Early Engagement Program at Silicon for the 2020 selects from Odisha based engineering colleges Silicon, KIIT, ITER, Trident and CV Raman. The two full-days program held on 24th and 25th February 2020 covered orientation by FSS team members followed by hands-on lab sessions on the FSS Head Start module by E-Box.

Indian Navy Awareness Session

The Industry Interface Cell co-ordinated a students' address session on "Indian Navy Awareness cum Publicity Campaign" on 11th February 2020. Interested students from 3rd and 4th year attended the session addressed by Lieutenant Abhishek Joshi from Indian Navy. Lt. Joshi, during his talk-cum video presentation, briefly touched upon the see-saw changes in the Indian Defense sector in general besides talking about career opportunities in Indian Navy for engineers and the computer based Indian Navy Entry Test (INET) through which the students can try for a lucrative career in Indian Navy.

Data Science Program

As part of Industry readiness program the Industry Interface Cell hosted technical training on Data Science course for our B. Tech. and MCA students. This is the 2nd batch of Data Science Module which started from 18th January 2020. In total 29 students from 6th semester and 4th semester have registered their name for this course which is being taught and guided by Industry experts.

VLSI Internship Program

As a part of summer internship program, the Industry Interface Cell floated the course on "Foundation on

VLSI” which started from 26th February 2020. Forty-two students from the 2nd year and the 3rd year who are interested to make a career in the VLSI industry have enrolled for this course after being instructed and guided by VLSI expert Mr. Punit Mittal, who is having more than 15 years of Industry experience in VLSI field.

Student Achievements

CAT 2020 Results

Eight Siliconites have qualified in CAT 2019-20. Akash Das from 4th year, CSE scored the highest 93

percentile followed by Devidutta Sahoo from 4th year, ECE with 92.22 percentile and Anand Kumar from 4th year ECE with 92.16 percentile.

GATE 2020 Results:

Twenty-five Siliconites have qualified in GATE 2020. Raju Yadav (AIR 45, ECE) and Raj Jha (AIR 222, CSE) from Batch 2015-2019 have scored the highest followed by Amlan Prateek Acharya (AIR 527, ECE), Rishi Kumar (AIR 1046, AEI) and Karunesh Kumar (AIR 1531, CSE) of Batch 2016-2020.

Industry Lectures

The Industry Interface Cell at Silicon, with the help of faculty co-coordinators from the respective departments, conducted the Industrial Lecture sessions for the 6th semester students during the January to March 2020 quarter. The Industrial Lectures conducted are:

Industrial Lecture During January to March 2020			
Date	Resource Person	Branches	Topic
11-01-2020	Er. P. K. Pattnaik, AGM, OPTCL	EEE	The inter-linking game of voltage and current
28-01-2020	Priyatosh Sahu, Alumni 2019, Infosys	CSE	Industry Readiness
03-01-2020	Dr. Punya Brahma Panda, Applied Material	ECE, E&I	Nano Technology
07-02-2020	Dr. Pratap Ch. Panda	EEE	Indian Power Sector Scenario & Reforms in Power Sector
07-02-2020	Mr. Suneel Kumar Tiwari, IES, Made Easy (New Delhi)	ECE	Success Story, Industry Requirement & Career Motivation
15-02-2020	Er. K. C. Bisoyi, AGM, OPTCL	EEE	Sub-station Layout
28-02-2020	Mr. Padma Lochan Gouda, AGM, OPTCL	E&I	Role of SCADA in power sector for effective power management.
07-03-2020	Er. K. C. Bisoyi, AGM, OPTCL	EEE	Electrical Safety
08-03-2020	Laxmidhar Pradhan, LTE and 5G (SME), Reliance JIO	ECE, E&I	5G for Everything
14-03-2020	Er. Jitendra Kumar Khilar, Dy. Manager, NALCO, Angul	E&I	Industrial Automation and Management

Notification

Submission of different feature articles for SLATE and Digital Digest can be made through soft copy and sent to the e-mail ID: publication@silicon.ac.in. Students' Corner, Stories, Poems, Short Essay, Compilation of Interesting Facts, Scanned copies of Sketches or Paintings can be sent for SLATE. For Digital Digest articles on DD Features, Profile of a Scientist, Space Technology and Environment Awareness Concepts are invited.

The following are the prize winning poems and essays from the Poetry Writing-Recitation Competition and Essay Writing Competition held for the Annual Function.

Transient Dawn

That day, when I saw
a rose bud in the garden bloom,
Life happened!

Strange was its magnificence,
Stranger was its process,
While strangest was its poise and elegance.

Fighting all the way up,
With a small sword in its defence;
Turing the coldness of the dew
Into a view of magnificence.

Cherished as a symbol of both love and death,
No matter what, adorned with a perfect smile,
Always maintaining its grandeur grace,
That day, I learnt something.
That day, the transient dawn happened!

Isha Bharadwaj
CSE, 4th Sem.

Bud & Johnny

That day when I saw the
rose bud in a garden bloom,
I walked to it to have a closer view,
In hope that it would make me cheer
And remove my dull day's gloom.

I reached the bud and to behold,
what a sight to see!
The bud had grown inches tall,
blooming in full glee,
I wondered how the bud would look,
in a week's time,
Scarlet red or bright pink,
But elegant I bet you a dime.

Will it be handsome,
Veracious and ingenuous as little Johnny is?
Or will its innocence and naivety come to cease?

Regardless,
I was sure that the rose would bloom one day,
For when the bud had braved the winter, what
deterrence could summer bring its way?

But alas! One morn I see that the bud has
withered away
And the gardener could not care less,
As Johnny would not turn out the man he aspired
to be
In this world of careless and hostile mess.

Sangita Khandual
CSE, 6th Sem.

Nurture, If You Love

That day when I saw,
the rose bud in garden bloom,
Despite the stormy night,
defying all the worldly gloom.

Memories of my childhood flashed,
I traveled down the lane,
My best friend and I, the fun we had,
and all the pleasure and pain.

I loved the rose,
the velvety petals and its beauty dripping down
Every time I plucked one,
I would hear my best friend, frown.

He was the one who taught me,
defining life and the art of love,
Nurturing, growing,
caring that's all we have.

The darkness of ignorance,
Clouded my mind, then
Everything he explained just had gone in vain.

But now in his absence, I hear his words echo
I nurtured, cared and watered and that is how the
rose showed.

The ground where the rose blooms,
despite all the odd ends
Underneath is the graveyard where sleeps my
best friend.

Arpita Mohanty
CSE, 2nd Sem.

Liberty Terms and Conditions Applied

Sir Isaiah Berlin had rightly said, "Liberty to wolves is death to lambs"

Liberty has been derived from the Latin Word 'Liber', which means 'free'. But it comes with its own set of limitations. It's a word which is bound to dilution, in practise. This mere word has set an underline rush in the patriots; it has initiated revolts and ignited wars.

My definition of liberty has numerous points. According to me, liberty means to act as per my wishes and desires, like sleeping till the clock strikes twelve, making my own decisions, being able to travel alone etc. Liberty should be, being able to do what one wants without any restrictions or resistance. But, just like chemistry, it has exceptions too. Few exceptions are for the good and others, just a setback. According to my understanding, one's liberty shouldn't harm him, or others. For example, smoking is injurious to health, so one shouldn't access it although he or she has all the freedom to do so.

The setbacks to it are no less. Being a human, I have all the rights to access my liberty but being a woman, I am denied most of them. I am stopped from wearing what I like; going to the places I want to, travel at night and many more. Many laws have reserved seats for women, in buses, in institutions and in companies. But the question is how many of them are accessed. Women do not have the liberty to access these rights. The reasons are many, sometimes it's oppression, at other times it's fear. Coming to the male point of view, their struggle of liberty is often undermined because it is not written in the constitution, neither politicians nor even the people talk about it. Their liberty to express their pain, to cry, to show affection is crushed under the definitions of the society, of being a 'Man'.

Hence, Liberty itself is an irony, a very flexible

term which takes forms according to the way one defines it.

Aripta Mohanty
CSE, 2nd Sem.

My Definition and Understanding of Liberty as a Youngster

"Between stimulus and response, there is a space and in that space lies all our freedom". Basically, Liberty is the state of being free within society from oppressive restrictions imposed by authority to one's life, behaviour, political views, etc. The conception of liberty is highly personal and is affected by different factors like culture, religion, behaviour, education etc.

My definition of liberty, as a youngster is the interdisciplinary combination to problems and contemporary situations. Free will and responsibility are the two main pillars of liberty. It means that independence of a person's free will is bounded by responsibility to his own thoughts and actions. It is very much essential that teenagers should be provided with their own space which is private, away from constant scrutiny and outside social stigma; they should also be allowed to do things of their own and whatever they want to do, as long as they are doing it within the limit and not involving themselves in wrong things. "We are our own dragons as well as our own heroes, and we have to rescue ourselves from our own selves". Obviously, teenagers will make mistakes as everyone else does, and experience is the best teacher. We learn a lot from our own mistakes and further try to correct and rectify it and try never to repeat that mistake again. We are not all the same! Not every teenager is the same. Youngsters should have control on their own life so that they know how important and valued their decision is. They should be given independence for doing whatever they want to do. After all it is their life.

The concepts of freedom and liberty are what make us moral human beings. They include self-governance, self-determination in combination with tolerance, respect and behaviour towards others. We should leave no stones unturned in the pursuit of achieving full freedom and liberty even when there comes any obstacle. We should fight against the obstacles and get out desired liberty and freedom.

Soujanya Paikray
CSE, 2nd Sem.



Prof. Monorama Swain is a Sr. Asst. Professor in the department of ECE and also the FIC of ISTE, Silicon Students Chapter for more than 10 years. She received the ISTE Best Faculty Award for the year 2019. She talks about her work related to

ISTE in this interview taken by Miss Disha Kumari of CSE (2016-2020).

Disha : Congratulations Ma'am. How do you feel about receiving the Best Faculty Award by ISTE for the year 2019?

Prof. Swain : It is really a proud moment for me. I would like to thank all my colleagues, friends and family members who have always motivated me to stay focused and do my work with all the dedication I have. This award for me is like a blessing from the Almighty.

Disha : Can you please throw light on events conducted by the ISTE Student Chapter at Silicon of which you are an integral part?

Prof. Swain : ISTE Silicon Students' Chapter has been working with many students. It always helps me explore different fields than I am currently in. Over the years ISTE has successfully taken shape of a very elite technical club for students of Silicon. It is the dedication of students, chosen as the office bearers of ISTE, are instrumental in making ISTE events successful every year.

Disha : How do these events help students gain technical skills?

Prof. Swain : ISTE events focus more in developing analytical and thinking skills in unique ways. Our main aim is to plan competitions in such a way that they help students to fully use their brain in

solving problems, within a stipulated timeframe. However, these competitions incline more towards technical aspect so that even if a student takes part in the competition and doesn't win it, he/she should take away some knowledge from it which will be helpful for them in future.

Disha : This year the ISTE Silicon students' Chapter organized the first ever CODE CLASH and a 24-hour Hackathon. How did you prepare your team to conduct this event?

Prof. Swain : The planning phase was really tough. However, the team was highly motivated in conducting these events because they too wanted to change the pen and paper-based conventional exams. We broke down the entire work into small tasks and had fixed deadlines for them. These were summed up with frequent team meetings and planning. Most things worked out as expected while few couldn't be done due to lack of time and resources. However, the students kept trying till the end to fill up the little gaps. Overall the major tasks were accomplished successfully. I am really proud of my team because they did a commendable job during both the events with great coordination.

Disha : Do you have any message for your students?

Prof. Swain : I would advise all my students to have a positive work life balance. Students should occasionally take breaks from academics and take part in challenging events where they can actually put their skills to test. They might as well take up their hobbies and start working for them professionally.

Disha : Thank you, Ma'am, for sparing time for us.

Prof. Swain : Thank you so much, Disha! It was a pleasure talking to you.

Abhijeet Sahu
AEI, 4th year



Hey all, I was asked to write something as parting words for all of you but I don't think that the word 'parting' really does justice to it. Well these four years were nothing sort of a roller coaster for me but I am glad that I had such an amazing experience. Four years prepare you for what is out there in the real world. If you ask any of the fourth year students, they will have a common answer that I was a different person when I entered the gates of Silicon and leaving as a different person from Silicon; now why is that? Well if you ask me it's the whole journey that has an impact on you as well as how you think, this is a complete process and completing it is difficult and exciting too. One goes through a lot in these four years. Everyone has his/her own stories but how you pick yourself up after such an event is important. Remember that you need to create your own story and these four years is the best time to completely open yourself and do all the weird experiments you always wanted to do with your life and even if you don't succeed in one it's fine, life doesn't stop there. Explore until you find the thing you love to do and once there, give your 100% no matter the cost.

Anwesh Ratha
AEI, 4th year



People have their own dreams and journeys to fulfil and complete in their college life. I was no different. The day I entered the college I planned to enjoy the best days of my life here – have loads of fun and study a little. And then, the first day of college came. I will always be thankful to all the teachers who have believed in me. Cheers to all the college staff including the people at Information Cell, department of Establishments, Accounts Section, Publication Cell and Exam Section. Thank you for making life easier for us at Silicon. A huge shout out to the loveliest person and the most liveliest place in Silicon, Ashok bhai and ABD respectively. He and Sipu bhai have always been there for each and every one of us and has always welcomed us with warm hearts. Thank you all for giving me so many memories.

Mahamaya Kashyap
AEI, 4th year



Silicon will always be very close to my heart. This is where I had a complete change of personality, from an introvert I turned myself into an ambivert, or maybe an extrovert now. I give the credit to my friends who never gave up on me and helped me socialize. From being a very obedient and disciplined person I changed myself into a very happy-go-lucky, jolly kind of a person. The four year journey has been a really memorable one, and I will never forget my Silicon days.

Samarpita Pattnaik
AEI, 4th year



Life isn't good or bad. Life is a concoction of both and so was my B.Tech. life.

Beginning with my first stage-performance, when I was titled as AEI's Best Singer, when the nervousness was at its peak to my last stage-performance in final year, at Zygon, performing the branch dance with classmates, with full joy and energy. Ohh! What an experience it was.

One of my favorite periods in my life was when I became a part of the Student Council (SSC). I was elected as the class representative for two consecutive years. It really expanded my world. Being a CR, you become the voice of your class. Not only this, I learned handling pressure, managing events, being communicative. The favorite part of SSC was I got to know many seniors and juniors. Some of them were very helpful and the bond with them grew stronger. Honestly, SSC eventually became a family for me. In Smart India Hackathon 2k19, our team got selected for grand finale in NIT, Warangal. Though we couldn't win but it was a great competitive experience for me.

Being a hostel resident was the best thing. Utsav, Disha and Aradhana these three people are my lifelines and I know they are going to be my lifelong friends. They supported and encouraged me to secure my placement in a reputed company, Infosys Pvt. Ltd. I'll never forget the four years spent with them.

I don't want to leave this place and I also want to move on in life. Thanks Silicon for giving me such

wonderful moments that I will cherish forever. It has been a great journey.

Disha Kumari
CSE, 4th year



In the journey of life, Engineering is said to be one of the most special phase. The amount of exposure and grooming one receives at this phase shapes their personality, career and the whole future. I feel fortunate to have chosen Silicon for this chapter of my life. With little expectations, I stepped into this college, but this college has given me a lot more than I ever imagined.

I was able to grow a lot as a person. Starting from the togetherness in various clubs including Meta-Academics Cell, Publication Team, and SSC played really important roles. Seniors had also been amazing in the college who taught us a lot of valuable things which I am sure couldn't have been taught in classrooms. This college helped me find my best friend or rather a constant buddy who not only supported me but also encouraged me to do things out of my way. Juniors were lovely and within a very short period became very close to me, I wish all of them a very good luck. All in all, I found support in every aspect one can need from this college and that is what makes it so difficult to leave Silicon now.

I have received immense love from my teachers. I would like to place gratitude to all the faculty members whose selfless guidance and invaluable teachings made B.Tech. possible. I take an opportunity to thank our non-teachings staff who have somehow helped me grow in these 4 years.

Can't believe the four amazing years are over so soon and I am going to miss everyone and everything here – be it the hostel life, canteen, classes, campus, Skylab or the clubs. Silicon has created an efficient woman out of me. I hope it helps people in building themselves in the future as well. Silicon Institute of Technology shall be a beautiful chapter of my life.



Ayush Ranjan Sahoo
ECE, 4th year

So it's a matter of one month and probably we've got no ideas what comes next in our live. It's really hard to believe that only one month

is left and after that we would all be on our ways.

Being a Siliconite is quite challenging. Silicon made me learn how to handle pressure.

We were having such hectic schedule of eight classes in five days. And being an introvert, it was difficult for me to make friends, but I finally made friends though few but good. Moreover, they all helped me to make memories out of these four years, which makes me feel nostalgic. Ultimately, this college has helped me a lot in shaping up my personality and made me a better person. All thanks to my teachers, non-teaching staff members, friends, seniors, juniors and all those out here in Silicon who made my life so easy and memorable here. Definitely these four years of togetherness has given me years of beautiful memories.

Saswati Panda
EEE, 4th year



I still remember that rainy, muddy day when I stepped into the 'dehleej' of this Institute and have never imagined that such bitter beginnings can lead to a cheerful journey and a nostalgic ending. When I peep back through my memory I can see my four years walk as a rainbow pastry, when taken together gives the sweet mixture of all memories but when analysed layer-wise, it reminds of every sweet-sour happenings. Silicon taught me a lot in these four years. Finally a gratitude-filled bow to all my co-travellers for offering me such an amazing journey.



Chandan Kumar
ECE, 4th year

I can still remember that rainy day when I entered SILICON and from then it all started as a nostalgic expedition. To be honest, initially it was difficult to adjust in a place which is 1000 Kms away from home, but gradually it became a delightful one. These four years were definitely not a duck soup rather it was like a sinusoidal wave, sometimes at its peak sometimes below the expectation axis. But one thing we must do, "keep moving". I enjoyed a lot while working in the Meta-Academics Cell and am very proud of being a part of the organizing committee of

SIT Model United Nations 2020. Engineering in Silicon is not only constrained into getting a degree or knowledge, but also it's about making a person self-dependent, disciplined, joyful. I would like to give my gratitude to all the faculty members whose guidance made B. Tech. possible for me. The memories I have made with friends will always be worth remembering. Entry from Gate 1 and exit from Gate 2 somewhere in between a teenage guy got molded into a responsible person, and this credit goes to Silicon and the people. To all juniors, enjoy your college life, do what you love and make everyone proud. You all will be missed. Thank you Silicon Institute of Technology and Siliconites.

Samikshya Mahana
EEE, 4th year

It was 8th of August 2016, I stepped into my college campus with no idea of what am I going to do here for the next four years. The only thing I knew was it is going to be a roller coaster ride for me. Being clueless, I was only spending my initial days when I came across some strange, crazy people like me which includes my friends, roommates, classmates, lab-mates etc. However, now they became my second family who made my life worth living. Starting from classroom, lab records, surprise tests, assignments, quiz, internals, seminars, projects, PPT classes, Skylab, T-square, ABD (Ashok bhai dokan), north lawn, canteen, cafeteria, BB-court and of course my girl's residence in fact everywhere I have made many memories within these years which will always be worth cherishing.

I don't know whether we will meet or not, whether we will be in touch or not, thanks to all of you. Thank you SILICON for giving me these four years of experience.

Priyanka Mangaraj
ECE, 4th year

I never really thought the days of writing "Parting Words" will arrive this soon. It seems like yesterday fast forwarded to now. It really is "the end of an era". As I look back at these past four long but fulfilling years, there are some things that I shall never forget. It's hard to believe that at one point we were little

freshmen entering into these doors, with no idea what was in store for us. With passing years, not only Engineering but also this Institution is what I lovingly embraced.

Being a localite, I initially doubted of having missing out on moments but to my surprise I can say I have enough memories to cherish and roll happy tears. IEEE Student's Chapter, Meta-Academics and Creative Club definitely helped me grow as a person and boost my skills. Silicon was a beautiful learning experience, during which I discovered the value of friendship and the importance of individualism.

I am sure years after when I tour this home, it might have changed geographically but I am sure the flash back will remain unchanged. I cannot end without thanking 'SLATE' and mentioning how proud I am to be a part of it on several occasions.

Heartily 'Thank you' to all the faculties, extending my best wishes and love to all the juniors.

Indrani Singh
EEE, 4th year

The journey of Engineering life has been a roller coaster ride for me with ups and downs but still will always remain close to my heart. I entered college with the thought of just getting a degree but by the end of the journey I realized that it's not just a degree that I will get but even a bunch of memories that I can cherish life long. This journey began with the demonetization and ended with the corona pandemic but still the days within were great. As a junior, I got support and encouragement from my beloved senior and as a senior, I got love and respect from my juniors. The teachers of our college might be a little strict from outside but whenever I faced any problem, let it be regarding my personal life or studies, they always stood by my side. The people that were strangers to me at the beginning are now the ones closest to my heart. Ashok Bhai and Sipu Bhai always acting as elder brothers on whom one can rely and get advice from. Thanks to all the events that were organized where I could express myself in the form of dance or words. I will miss my Basketball team, who were like a family to me and where I learned teamwork. The exam time place is the library, the lunch time and consultancy period places are cafeteria, canteen, T-square and skylab and for the after-class ABD being there for the



rescue, these places are where I made a lot of memories and friends will always be missed.

We may or may not cross paths in the future but the people that I have got here will always remain in my heart forever. I thank Silicon Institute of Technology for giving me the opportunities and exposures from which I have learned many things for the betterment of my future.



Preetika Patra
EEE, 4th year

Last year I was the one collecting parting words from my seniors, but here I am now, writing my own. Though reminiscing all those moments of the past is making me nostalgic, still I would like to say

something to you all. In the freshman year, we all think that these four years are going to be very long and tiresome, but you know what? It's going to be over in a snap and trust me; these will be the best four years of your life, so, enjoy it while you still can.

I can still remember a girl, who was not that confident, but still determined. Now here she is, little more confident, and much more determined. In a nutshell, it is not just about the knowledge that you gain or the jobs you do, but the memories you gather.

Life here has been a roller coaster ride for me. From juggling between classes, internals, lab tests, vivas, and semester exams to meeting new people, running home during vacations, and spending time with my friends, these four years have taught me how to live. Thank you SIT for making my days unforgettable.

The Meta-Academics Cell and SLATE gave this literati a place to take solace in, Thank you guys for being there for me. Here's to all my loving friends, juniors and teachers, Thank you all for making my engineering memorable.

Aditi Agarwal
IT, 4th year

When I look back at 4th August 2016, I am occupied with a nostalgic and thrilling feeling. Back then, things were all new and exciting. And because I was a fresher, there were fears hiding, beside the beautiful curtains of confidence and smile.



Gate No. 1 was marked as the entrance for students and their parents. I was fascinated by the architecture as I entered into the campus. Soon after, we had our Orientation Programme where we met other fellows from our respective branch. And as days passed by, we all got to know each other very well. We crossed paths with people who had the same mental disorder (laughs) like us, and were bonded together for ever.

From being an introvert, to becoming an ambivert, the journey of these four years had been an adventure like a roller-coaster ride.

Together, we had faced all the odds and counted stars. There were days, when we wanted to get out and scream, but every one of us has held the other firmly and made it clear that "It is possible together".

We had witness fights and love, tears and happiness, anxiety and peace. But above all, we had it all together. Four years marked the end of this beautiful journey where we transformed from a sapling to a tree. And as we approach towards the end, we will turn back and look over every memory we have created, experiences we have shared, situations we have been through and embrace it with all we have.

Ritwik Chitransh
IT, 4th year

The journey was a complicated mix of ups and downs, yeses and nos, victory and loss that taught us to look on the brighter side rather than wasting time on illuminating the darker ones. Incidents and accidents all surrounded us as if we were completely spun across the yarn, but we never gave up. There were times when we all suddenly realised that we grew with a snap of a finger which was too much to take in. Yet we all gulped it like a piece of cake. Memories were getting created with each action that we made, for each moment that we cherished together, and these memories are more than enough to remember those good old golden days. Stories will be attached with each one of us individually describing us uniquely and that is what all matters. Divided we came but United we are going out and it is in itself a great achievement for all of us. This is all what we have done. But now all I hope is that someday in the future journey of our life there will be times when our smiling faces once again coincide and that will be sharing our accomplishments of four years.





It has been an enlightening journey since I graduated from Silicon. I was fortunate to meet incredibly talented people from across the world and, had an opportunity to experience cultures and customs that were eye-opening.

I had started preparing for CAT and other MBA exams while in the 4th year. But in hindsight I realize that doing an MBA immediately after graduating is not a good idea because you don't have enough work-experience which builds those critical thinking skills, to articulate and solve business problems. A good analogy is - when you are preparing to buy a Ferrari without even knowing how to drive.

Hence I joined Infosys. After the training in Mysore, I was posted in Pune as a Quality Analyst for a US Healthcare major. The Key skills I gathered were in Testing, Client and Project management. The one learning that stuck with me was that, irrespective of whether someone is auditing your work or not, ensure it adheres to the quality expectations that were set. Your diligence, eye for detail and inquisitiveness at work is a reflection of your capabilities. It goes a long way to set up your career.

While at Infosys, I dabbled with launching a start-up in the food space which did not even take off but it taught me that if you want to solve a new problem, you have to dedicate undivided attention to it.

I wanted to do an MBA in Marketing in the US and for that I needed at least some experience in Marketing. So after 2.5 years I quit Infosys and joined a start-up in the food space called Scleroid Tech, and took charge of the Marketing department. We offered inventory and digital marketing solutions to small restaurant enterprises in Pune. I had to go from door-to-door to restaurants in Pune and pitch our product.

After a year at the start-up, I was ready to embark on my MBA journey. I prepared for GMAT, identified my target schools and started writing my application essays. It's a good practice to have clarity on the specialization (ex. Marketing, Consulting and based on that you should choose the country and even the city you want to be in. MBA is a life experience and you

learn mostly from your classmates and the place. Hence just taking a shot in the dark can be an expensive mistake. Do your research and target the B-schools that will compliment your personality and aspirations.

Based on my GMAT score and application, I got 50% scholarship in the University of California, Irvine (Los Angeles) which was the 40th ranked B-school in the world and top 10 in the US. Since I wanted to pursue Marketing in Media and Entertainment (read Hollywood!) and this college was in LA, I went for it. At LA I had to be open to new opinions, cultures, food and habits.

Looking back, I would say I got it right. Our MBA class had students from 20 countries and Los Angeles is itself a hot-pot of so many cultures. I was the first Indian to become President of the Speech and Presentation Club of the university and also got selected as VP of Marketing Association.

I became the first Indian from my B-school to be selected as a Brand Marketing Intern at Mattel Inc. (the world's biggest Toy manufacturer with brands like Barbie, Hot Wheels and all Hollywood movie toys).

After graduating from University, I joined my full-time position as Marketing Manager in Disney Animation for Toy Story 4 and upcoming Pixar movies. The most challenging job of my life it taught me to juggle between a billion responsibilities, manage my time efficiently and learn at the same time.

I quit my job in LA and decided to return to India. I was extremely choosy in applying to jobs in India and when I saw an opening at Amazon India, as the Category Manager for Gaming, I knew this was the next step. Currently Category Manager in e-commerce is one of the best positions you could apply for. It is akin to being a CEO of a small company.

I am not the smartest of people around. My 'superpower' is that I understand my strengths and weaknesses and my passion and to go for things I believe in, be it gaming, Movies or Food.

So, I can really say it's pretty straightforward to be happy ⇨ Understand what you want in life ⇨ Understand what you are good at in life ⇨ Do your homework ⇨ Go for it!

Cheers!

Bharat Yellumahanti

(bharatyellumahanti@gmail.com)

Silicon Batch (2008-12)

Horses can Spy



Picture source: Internet

The word Trojan refers to the people of Troy. Trojan horse on the other hand was a large hollow wooden horse filled with soldiers for subterfuge from the story of Trojan War. A Trojan horse today has two meanings: the horse gifted to the people of Troy by the Greeks in ancient times or a computer malware. The latter is named so owing to the characteristics it derives from the former. As per Greek mythology, The Trojan Horse was a huge wooden horse gifted by the Greeks to the people of Troy as an offering to Athena. This was done as a gesture of peace with Troy. After gifting the horse the Greeks sailed away to a nearby island. The horse was taken inside the main gates of Troy amidst celebrations. That night the Greek warriors who were hiding in the belly of the huge horse came out and opened the gates to let in the Greek Army (who had pretended to sail away) to capture Troy.

In the context of computer malware, a Trojan Horse is similar in characteristic wherein it masquerades as a benign and legitimate application but actually causes damage to genuine programs and has the capability of stealing personal information, spying and gaining back door access. Usually people are tricked into using such Trojans by some form of Social Engineering. Trojans are classified based on the actions they take, some of which are mentioned below:

RootKit: purpose is to remain undetected and gain

unauthorized access.

Exploit: takes advantage of a bug or vulnerability for installing malicious code.

Banker Trojans: Software designed to steal account information related to online banking and e-payments.

Backdoor: enables a remote attacker to gain access and control of compromised computers remotely and make them act like zombies.

Trojan Ransom: prevents the user from accessing his own data by blocking/encrypting and then demands ransom for restoring normalcy.

Apart from the above mentioned Trojans there are others namely: Trojan DDoS, Trojan Downloader, Trojan Dropper, Trojan Fake AV, Trojan Game thief, Trojan Spy and Trojan SMS etc.

Unlike computer viruses and worms, Trojans are not able to self-replicate. And the best part is they take your permission before entering although as imposters. Hence to prevent such malware it is advisable not to download e-mail attachments and software from unknown sources, patch security holes and install anti-virus which include security against Trojans.

Dr. Sushree Samita Rout
Associate Professor, CSE Dept.

Sustainable Development Goals (SDGs)

Sustainable Development is about meeting the needs of the present without compromising the ability of future generations to meet their needs. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nation's Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The 17 SDGs are integrated that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.

The SDG India index was developed by NITI Aayog, the policy think tank of the Government of India. This index intends to provide a holistic view on social, economic and environmental status of the States and Union Territories of the country.

<https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>



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