

HIGHLIGHTS OF THIS ISSUE

Travel Diaries:
a trip to the Sudarshan Art
& Crafts Village

Silicon
...beyond teaching

SLATE

Silicon Language for Arts Technology & Education

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Our Mission: "To provide the best of technical skills, professional ethics and human values in enriching the disciplines of Science, Engineering and Technology for social development and Nation building"



The Institute of Engineers India (IEI), Odisha State Centre has awarded Ms. Monorama Swain with 'The Institution Award' on 28th March during its 62nd Technical Session.

Congratulations to



Akash Kumar
Branch: CSE
Batch: 2016-20
for securing **AIR 20** in GATE 2021



Koustuv Ray
Branch: CSE
Batch: 2017-21
for securing **AIR 69** in GATE 2021

for their outstanding performance in GATE 2021

From the Editor's Desk ...

Dear Readers:

We have already completed yet another year. And perhaps it is for the first time in our recent history that we stayed away from each other in our celebrations and mirth. But what is most notable here is that the struggle for existence has been replaced by the strife for excellence. We no more bother about how we exist, but how 'well' we exist with our given resources generating the best possible solutions even in the face of adverse conditions.

The endeavors invested by the entire Silicon family is here worthy of mention; not to forget our student fraternity, their cooperation and adaptability to the newly devised measures of virtual reality taking over the conventional methods of life style. But this is to remain! The modus operandi through a virtual platform is the recent thrust which will go a long way. Even though there had been several pitfalls in the medium but as a matter of expedience there had been many other fringe benefits to augment its importance. #Work from Home (WFH) became the new normal and practically nothing came to a standstill in our lifestyles and work force. This wave of change became the ebb and flow of our lives. We attended classes, we took examinations, seminars became webinars, online-payment and on-line voting became the call of the hour, improved safety measures were implemented along with hands-free gadgets, keeping our city clean; and in the plight and predicament of the situation we were all in it together.

At Silicon our academics continued unhindered and so was the examination process. And as I have mentioned earlier there of course had been some drawbacks but all of it added to our learning experiences to enable us to improve upon the process of making it better than before. We organized cultural fests, training programs, placement drives, internships, Council elections, farewell ceremony, Alumni Meet, webinars - all through the on-line mode of conduction. We have also formed a new cell named the SAGE-'W' (Social Awareness and Gender Equality for Women) under the framework provided by AICTE for the women achievers at Silicon inspiring them to take up leadership roles and observe the best cultural practices taking inspiration from the scriptures.

Let us all join hands in the attempt without forgetting that during our distancing we have adopted some healthy measures in our daily habits: washing hands, avoiding spitting in public, maintain reasonable amount of distance from each other and not usurping upon people's personal spaces, and of course wearing a mask. All these improvisations, though not very enjoyable, has to be maintained for a little longer time till we completely win over the pandemic. There has been a recent resurgence of the disease, unfortunately. So let us all behave sensibly and responsibly under the circumstances to get back to normal very soon.

Happy reading!

Ananya Roychoudhury
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Sundar Pichai CEO of Google & Alphabet. Inc



“You want to aim high enough you fail a few times; that's a natural part of the process. Even if you fail, you end up doing something great in the process.”

– Sundar Pichai

An idea is something buoyant like a virus, give it a form and it will return the same. The world demands the skills of leadership and detailed mind-set which makes a clear way for something unique and legitimate.

Pichai Sundararajan, born July 12, 1972, Chennai, Tamil Nadu, India, is now an American computer scientist and executive who was CEO of both Google, Inc. (2015), and its holding company, Alphabet Inc. (2019).

As a boy growing up in Madras, his mother, Lakshmi, was a stenographer, and his father, Regunatha Pichai, was an Electrical Engineer at GEC, the British Conglomerate. His father also had a manufacturing plant that produced electrical components. Pichai grew up in a two-room apartment in Ashok Nagar, Chennai and had a Hindu upbringing. At an early age Pichai displayed an interest in technology and an extraordinary memory, especially for telephone numbers. After earning a B. Tech. degree in metallurgy in 1993 and a silver medal at the Indian Institute of Technology Kharagpur, he was awarded a scholarship to study at Stanford University to pursue M.S. in Engineering and Materials Science, 1995. He remained in the United States thereafter, working briefly for Applied Materials a supplier of semiconductor materials and then earning an M.B.A. (2002) from the Wharton School of the University of Pennsylvania.

Following a short stint at the management consulting firm McKinsey & Co., Pichai joined Google in 2004 as the head of Product Management

and development. He became a prominent name within amongst others when he started working on the Google Toolbar, which enabled those using the Microsoft Internet Explorer and Mozilla Firefox Web browsers to easily access the Google search engine. Over the next few years, he was directly involved in the development of Google's own browser, Chrome, which was released to the public in 2008. That same year Pichai was named Vice President of Product Development, and he began to take a more-active public role. By 2012 he was a Senior Vice President, and two years later he was made Product Chief over both Google and the Android smartphone operating system.

In 2011 Pichai reportedly was aggressively pursued for employment by microblogging service Twitter, and in 2014 he was touted as a possible CEO for Microsoft, but in both instances, he was granted large financial packages to remain with Google. He also was known to have helped negotiate Google's \$3.2 billion deal to acquire Nest Labs in 2014. Therefore, when Google cofounders Larry Page and Sergey Brin announced the creation of Alphabet Inc., in August 2015, it came as no surprise to industry insiders that Pichai was named CEO of Google, which was reorganized as a subsidiary. In December 2019 he also was named CEO of Alphabet, replacing Page, who stepped down. Currently he is the CEO to both Alphabet and Google with a net worth of 5900 crores.

R. Avinash Prasad
ECE, 4th Sem.

Berhampur - A City with a Unique Soul



In the lesser-known parts of Odisha, towards the southern end, there lies a city popularly known as the Silk City of Odisha - Berhampur or officially referred to as Brahmapur, The Land of Brahma.

Distinguished for being a paradise for foodies and its exquisite beaches, the city has a lot more of culture, heritage and tourist places to offer than just this.

Diving into one of the most integral parts of the city, the language - during the British Era, Berhampur was merged with the Madras Province due to its proximity with the southern states of India, and hence, a large number of Telugu and Tamil speaking Indians were employed here. Till date Telugu remains as a major spoken language in the city, with its influence being such that the typical Berhampuri Odia is Telugu-accented in this region.

Coming to the rich culture and tradition, this city is believed to have a sacred aura of its own. Beside round the year pujas and rituals, the city specifically thrives during the bi-annual "ThakuraniJatra"- a festival which honours the region's presiding deity.

Defining the diversity of religions, Berhampur is home to multi-religion and multi-region people, all residing in brotherhood and harmony.

Regarding the content that makes the city what it is, the people residing in the city are one of a kind. Known for their limitless talent in varied fields, there are some famous personalities that call Berhampur

their home, like former President V.V. Giri, current Chief Minister Naveen Pattnaik and his father former Chief Minister of Odisha Biju Pattnaik, Commonwealth gold medallist K.Ravi Kumar and many other.

Regardless of everything, Berhampur remains a vague sensation without the food in this area. Starting with the roadside breakfast stalls to the Girija Restaurant, this city showcases volumes of varied food cuisines in different parts of the city, at an affordable price. The pickles of this region speak of a legend known to all throughout the state.

Being in Berhampur and not visiting Gopalpur is a story unknown to all. Gopalpur Sea Beach, lying at a distance of only 16kms from the city, well-connected by roads, the beach offers a beauty and serenity that only a few beaches in Odisha can provide. The seafood available near the beach makes the journey all the more successful and worthy.

Other than Gopalpur, there are places like Sonepur, Eastern Ghats, Taratarini temple, Jiranga Monastery, Dhabaleswara Beach, Balakumari hills and many more interesting and beautiful places to visit, in and around Berhampur.

Truly said, Berhampur is a city with a unique soul of its own, filled with beauty, creativity, innovation and a tinge of spices in the air.

Isha Bharadwaj
CSE, 6th Sem.

Do Trees Speak?



Trees are the best friends of the human race and share a lot of similarities with us. To our astonishment, our woody friends can also communicate among themselves. They check in with their neighbours, sharing food supplies and wisdom gained over their long lives. And they do all this rooted in place, unable to speak, reach out or move around.

The secret to their success lies under the forest floor, where vast root systems support the towering trunks above. In these roots, a symbiotic fungus called mycorrhiza prospers. These fungi have countless branching threadlike hyphae that together make up the mycelium. The mycelium spreads across a much larger area than the tree root system and connects the roots of different trees. The mycelium is nothing but the physical representation of what we humans call Local Area Network or LAN. Through these mycorrhizal networks, fungi can pass resources and signaling molecules between trees. It is known that the oldest trees have the largest mycorrhizal networks with the most connections to other trees.

But these connections are incredibly complicated to trace. That's because there are about 100 species of mycorrhizal fungi, and an individual tree might be home to dozens of different fungal organisms, each of which connects to a unique set of other trees, in turn each have their own unique set of fungal associations.

But we are yet to discover the reason exactly why does fungus transport resources from tree to tree? This is one of the mysteries of the mycorrhizal networks. It makes sense for fungus to exchange soil, nutrients and sugar with the tree, both parties' benefit.

The fungus likely benefits in less obvious ways from being part of a network between trees. But the exact ways aren't totally clear.

Maybe the fungus benefits from having connections with as many different trees as possible and maximize its connections by shuttling molecules between trees. Or maybe plants, reduce their contributions to fungi if the fungi don't facilitate exchanges between trees. Whatever the reason, these fungi pass an incredible amount of information between trees through the mycorrhiza.

You might be wondering now, "What information do trees need to share?" "Do they even know who they are talking to?" Well, the answer to the second question is a big yes. Trees can tell when nutrients or signalling molecules are coming from a member of their own species or not. They can even tell when information is coming from a close relative like a sibling or parent.

The mycelium is essentially an emergency alert system for trees; the bulk of their communication is regarding the changes in their surroundings. Trees share information about events like drought or insect attacks through the fungal networks, causing their neighbours to increase the production of protective enzymes in anticipation of threats. What impacts one species is bound to impact others. So trees can sound the alarm during an emergency. Mother nature never fails to fascinate its children with the wonders of her creation.

Anshuman Mahapatra
ECE, 6th Sem.

Overcoming Unhealthy Habits



Many people nowadays are addicted not just to harmful substances such as drugs but also to harmful behaviours such as net addiction. Even if we aren't addicted, we all have certain habits that overpower us. Can we overcome such habits? Yes. It's possible by finding something more meaningful to focus ourselves on.

When alcoholics want to disentangle themselves from their alcoholism, they tend to think that they are suffering because they are attached, indeed addicted, to alcohol. While that is true, a more complete truth is that there existed in their life a void that alcohol filled. Unless they can fill that void with something more positive, more meaningful, more fulfilling, they will find themselves relapsing into alcoholism, no matter how much they resolve to give it up.

In fact, alcoholics often stay addicted not because they love alcohol so much, but because they believe they have no other accessible way to fill their need for relief or comfort. To become sober, they need to channel their emotions elsewhere and therein fulfill that need. Without doing that, even if they become sober by sheer willpower, they won't be able to sustain their abstinence and will have a relapse.

Broadening this analysis to overall material attachments, the Bhagavad Gita (02.60) states that mere renunciation is difficult to sustain even for those

with great discernment and determination. One who is not soul consciousness, however powerful he or she may be in controlling the senses by artificial repression, is sure ultimately to fail, for the slightest thought of sense pleasure will agitate him to gratify his or her desires. In the Bhagavad Gita, Lord Krishna says that a person who is not disturbed by desires can achieve peace and not the man who strives to satisfy such desires. Although the vast ocean is always filled with water, during the rainy season, it is filled with much more water. But the ocean remains steady; it is not agitated, nor does it cross beyond the limit of its brink. That is also true of a person having soul consciousness; he is like an ocean always full in himself. Desires may come to him like water, but he is steady in his activities, and he is not even slightly disturbed by the desires for sense gratification which actually leads to suffering. Therefore, the next verse (02.61) recommends that we focus our mind on Krishna, the supreme personality - thereby centering our life on his love and service. When we understand that we all can become instruments for a benevolent power far greater than ours, acting on that understanding fills our life with profound meaning and purpose, empowering us to push aside and overcoming unhealthy cravings.

Ananya Anudarsini Tripathy
EEE, 6th Sem.

Sound Bites



Health is a very broad spectrum, encompassing physical, emotional and mental areas. The balance of every aspect makes a human healthy and fit. Indeed, health is the greatest wealth we possess and it is our first and foremost priority.

In the recent times, 'Depression' has become the buzz word.

Mental health is an ignored area in our country. In personal as well as social level, we do not consider it a part of one's health. In a country where every 7th person is likely to have mental illness, the administration doesn't keep a record of the rate of increase or decrease in the level of patients which clearly shows how neglected this area is, even from the political point of view. Taking some measure comes next, the first step should be addressing the issue. Abnormalities can be a consequence of various kinds of events, it could be the loss of any closed one, failure, tussle in workplaces, sour relationships etc. There must be some science behind this, but I would provide a quite generalized view on it. As human beings, any time if we feel like a person around us is under some stress, the least possible thing we could do is, just listen. From personal experiences, I feel when a person talks out his heart, somewhere a sense of relaxation penetrates. The brain becomes light. A little time and an ear to lend that's all it takes to lessen someone's burden.

If we shift our focus a bit towards physical wellness, we will find this field is also in the cynosure of events, during this epidemic. Less movement, closed doors has led to different issues like obesity, bad back, eye strain and many more. From kids to adults, everyone is bound to sit in front of gadgets for hours at stretch which affects the eyes and the body of the person. What we can do is, workout at home for few hours, maintain proper diet and sit in correct postures. As it is the era of social media, here comes its role. It should create social awareness among people to maintain healthy life styles.

Lastly, we should stay emotionally strong. Despite hurdles, or any kind of failure we should never lose hope and should try to remain happy. Every day we should focus on keeping ourselves and people around us happy. Happiness is the one and only thing each one of us aspires for. The ultimate goal of our lives. But the catch is, scientific studies claim that staying happy is also a stress buster, a pain killer and an immunity booster. It is also said that the more a person stays happy the more is his life expectancy. So why not focus on all smile and joy rather than attaching ourselves to momentary pleasures of life, mere competitions and materialistic things which actually degrade us?

Arpita Mohanty
CSE, 4th Sem.

The Engrossing Evolution of YouTube: How did it all start?



Do you know YouTube started in a cubicle? That's right. Chad Hurley and Steven Chen wanted an easier way of posting videos online with friends. This concept developed into one of the biggest, \$40 billion worth of online businesses serving up more than a billion videos a day.

Nowadays, it's virtually impossible to think about online videos without YouTube coming to mind. But 13 years ago, the internet's biggest video network actually did not exist. The platform has created a veritable revolution in how we consume content on the web from its introduction in 2005 to the present day.

Every month, YouTube has over 1.5 billion active users. And everyone spends an average of one hour and fifteen minutes each day watching videos on the platform. On the site, 400 hours of new content are posted, and 2 billion users daily. Well, that's a lot of videos!

Despite all these numbers, it's hard to recall, considering all these figures that YouTube hasn't always been like this. A little over a decade ago, the platform was merely a small start-up, unknown to the general public.

Back in the year 2004

Good ideas are born when you least expect them. A former PayPal employee, Chad Hurley, knows that very well. He found it very difficult to share a video which he filmed at a friend's house during a dinner party. "That's when he got an insight, "How about developing a service that would allow you to easily upload and share videos? It didn't take long for Hurley to join two other PayPal colleagues, Steve Chen and Jawed Karim, and on February 14, 2005, the trio created the youtube.com domain.

By 2006, YouTube was already a genuine phenomenon and one of the internet's fastest-growing

sites. The platform went from 4.9 million to 19.6 million users during the first semester, a rise of nearly 300 percent!

The platform became one of the best video content marketing tools after that. Many companies invest part of their budgets to advertise on the platform and increase their brand reach and visibility. The possibility of earning money with online videos attracted a growing number of content creators and consequently, users interested in consuming online videos. YouTube just kept growing!

A success that is far from over

The YouTube we have today is quite different from that of 2005, when the first video was posted on the platform. In addition to dozens of changes to the interface and new features being implemented, the site has adapted to the development of the internet itself.

YouTube is available in 76 languages in 88 countries and has local versions. The popularity of YouTube has also influenced a new generation of young people who want to succeed and become famous on the web. It's possible to equate the dream of being a YouTuber and make money with online videos to being a famous soccer player in the past.

The internet has given opportunities to millions of individuals to become producers of content, knowledge democratisation, and culture. Apart from, of course, forever revolutionising content marketing.

And that's the history of YouTube!

The lesson? You never know when your small business idea will be the product no one can live without. No matter what your passion is, you can succeed in the business world.

Saujanya Paikray
CSE, 4th Sem.

Attitude of Gratitude: The Way of life



As we express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them. – John F. Kennedy

Each one of us across the globe had our own share of sorrow, suffering, and pain during the pandemic COVID-19. It is observed that the prevailing uncertainty, fear, helplessness has created an atmosphere where people are vulnerable towards mental health issues. Many research studies have reported that there was increased rate of anxiety, depression, PTSD, psychological distress and stress among general population.

Therefore to get back to normalcy and to adapt to the new normal, practicing “gratitude” in everyday life will help in reviving. The term gratitude is derived from a Latin word, “Gratia” which means gratefulness or graciousness. Being thankful for everything that we have brings a different essence altogether. There are many researches in Psychology and especially in Positive Psychology which state that gratitude is one important human emotion and it has many positive impact on both physical and mental health.

Practicing gratitude has significant psychological benefits. Firstly, it shifts the attention from negative and toxic events or people to positive, happy events for which one is thankful. This helps in creating more positive emotions. Secondly, just the practice brings wonders in the lives of individuals and it has lasting positive effects on the function of the brain. Thirdly, people who practice gratitude are having elevated mood with lower level of stress, less depressed and anxious state of mind and lesser visit to the doctors for physical health. Fourthly, people showing gratitude are optimistic and hopeful. This enhances the bond with others and they feel more connected.

The advantages of gratitude are many and one can execute it wholeheartedly in the following ways:

- Train your mind to think, identify and notice the positive aspects of life for which you feel thankful and obliged.
- Write a thank-you note expressing your possessions in life or positive impact of any person in your life. You can make yourself happier and nurture your relationship with another person by sharing the thank-you letter.
- Keep a journal or in some way note big and little joys of daily life. Write down "three good things" identify three things that have gone well for you and identify the cause.
- Engage in "mental subtraction." Imagine what your life would be like if some positive event had not occurred.
- Most of us encounter negative and frustrated life situations regularly. When one feels upset and anxious, hit the pause button and reset the thinking. Come up with something positive about the situation or think about something else for which one is thankful.

The attitude of gratitude brings new perspectives to look at one's self, relationships, family, life situations and people. It opens new avenues of being hopeful, stronger and thrives a long life with enhanced well-being.

Dr. Saswati Jena

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Ever since the lock down imposed on us from March 2020, Silicon has taken to the virtual platform to conduct all events online. Events such as Farewell, Orientation, Induction, Alumni meet and many more have been conducted with tremendous success. It has been possible due to the effort of the adept Social Media Cell of our institute which operates under the able supervision of Professor Satish Das of ECE department. The team has about 10 members and this time we thought of featuring their experiences of conducting online events. These interviews will be published in two issues.

Nikhil Chandra Mahato

4th Year, CSE

Major programmes assigned

SMC was an incredible revolution in shaping the digitalized version of SIT, BBSR. I feel proud stating the fact that, I was one of the first students to be associated with SMC, alongside our mentor, Satish Das Sir. Starting as a Content Writer for SMC, our team planned out workshops, events, farewells for the passing out batches as well as welcoming the Freshers, we made sure everything was regularly posted at different platforms. At present I am a planner and senior-coordinator in the team.



Challenges faced

Although transforming events into digitalized form was not that hard, we faced issues with network and data connections, but that was handled by the college authorities very well. We by far, have been the most efficient team planning and pursuing every task we are allotted, with zero failure ratio.

Significant Accomplishments

We always deal with official assets, be it, workshops, orientation, or farewell ceremony. Each of them comes with its unique challenge and we have handled them all competently.

Akash Dash

3rd Year, CSE

Major programmes assigned

I have been part of almost all the virtual programmes organized by the Social Media Cell over Zoom platform. The tasks that were assigned to me were generally video editing and event management. I used to edit the videos of different speakers, dances, songs etc. and in few events I was also broadcasting those videos in a proper sequence over the Zoom video conferencing platform for the event.



Challenges faced

The major specific challenges were network issues and transferring heavy data files. But over a period of time, the networks improved and now the 'new normal' seems completely normal.

During the initial days of the 'new normal', I used to travel a lot of distance in order to get better connectivity (which was my major challenge) and then used to work there and return home. Gradually, I adapted some of the smart methodologies in order to complete the task and overcome the challenges.

Significant Accomplishments

Organizing completely virtual farewell for the B.Tech. and MCA batches and handling the entire Induction Programme of Fresher's including Fresher's Party was the most significant accomplishment of the Social Media Cell till date.

Akash Pandit*2nd Year, CSE***Major programmes assigned**

I was a part of programmes conducted by the Social Media Cell such as MCA Farewell, B. Tech. Farewell, Silicon Vibes, Orientation Program 2020, Fresher's 2020, Alumni Meet 2020.

I was assigned the role of Anchor in all these programmes except for Orientation Program 2020. In the Orientation program 2020, I was assigned to keep a check on the technical requirements. I was also assigned to click screenshots of all the events. In the Fresher's 2020, I was helping the EEE branch in the smooth conduction of the event on behalf of the Social Media Cell.

Apart from these, my role in Social Media Cell is to look into the Twitter handle of the Institute.

Challenges faced

Network issues, technical difficulties and coordination with co-anchors were some of the challenges that I faced at times.

I had to switch between networks and luckily there weren't any major network issues during the event. In case there were any, we always had a backup anchor to deal with the same. We had multiple rehearsals and dry runs to solve the coordination issues with the co-anchors. Technical difficulties were taken care of by the Technical team of the Social Media Cell.

Significant Accomplishments

I think, The Alumni Meet was the most significant accomplishment of the Social Media Cell so far. Due to the pandemic, we could not conduct a physical Alumni Meet, but we managed to bring our Alumni together on the online platform. All of them enjoyed the event and could rejoice in their memories of their alma mater.

**Anubhab Patnaik***2nd Year, CSE***Major programmes assigned**

I was a part of programs like Fresher's 2020-24 batch, Farewell, Alumni Meet, Silicon Vibes, Campus Tour & Introductory video of the college.

Challenges faced

One of the most difficult challenges was carrying out regular college field tasks as I am the photographer of my Cell. I had to come to college on a regular basis and click photos and videos, talk to the faculty members and record their videos, edit them alongside managing my online classes.

Significant Accomplishments

I consider the Farewell 2016-2020 to be a significant achievement as it was first mainstream event and we handled it perfectly. We saw amazing anchors, amazing management and excellent leadership skills by the team in this event.

*to be continued...*

Silicon Vibes: A Cultural Ensemble



The Silicon Cultural Committee and different extra-curricular clubs conducted a series of six online competitions among students under the banner of Silicon Vibes: A Cultural Ensemble. The prizes for the same were presented on 3rd October 2020 with an online concert. The concert was coordinated by the Social Media group of Silicon. It was a nonstop event for about 70 minutes with songs, dance and video presentations. Students joined the program through the zoom platform as well as you-tube.

NSS Wing Talk

Prof. Dr. Bhagyalaxmi Jena from Electronics and Communication Engineering department delivered an online talk on "Education and Technology during Pandemic" on 8th October 2020 at NSCB Government College, Sambalpur, Odisha. Many faculty members and Students joined the webinar with great interest.

Achievement in Elocution Competition



Students from Silicon excelled in the Elocution Competitions organized by NALCO during the Vigilance Awareness Week Celebration from 27th October to 2nd November 2020. Our students stood first in the competition in all languages: English, Hindi and Odia. The winners are Sanath Kumar Swain from 4th Year EEE, Geetansa from 2nd Year ECE and Annada Gumansingh 3rd Year CSE in English, Hindi

and Odia language respectively.

Pollution Testing Camp



A Pollution Check-UP camp was organised inside the institute campus by the Staff Welfare Committee for Two-wheelers and Four Wheelers on 21st October 2020 and 9th November 2020 respectively. Many staff members availed the facility.

Webinar on "Industry Internet of Things"



The Department of Electronics and Communication Engineering and the Department of Electronics and Instrumentation Engineering of Silicon Institute of Technology, Bhubaneswar conducted a three-day webinar on "Industry Internet of Things" from 11th to 13th November 2020. This webinar primarily focused on cutting-edge technologies in resolving various problems related to day-to-day life and industry. With overwhelming responses of 233 participants registering from all over India the webinar was conducted on a virtual platform. There were six interactive sessions. Er. Anish Sarangi, Fusion Practices Pvt. Ltd. delivered a talk on IOT and its 5 Vs. Prof. D. P. Acharya, NIT Rourkela spoke on Industrial IOT: Perspectives and Road Ahead. Prof. Santosh Das, NIT Rourkela highlighted Industrial IoT and its application. Er. Debasis Satapathy Data

Scientist, Capgemini emphasized Digital technologies and future Job Trend. Er. Renjith C V, Philips India Ltd. addressed on Architecture, Technology and Protocols and Prof. Albena Mihovska Aarhus University U, Denmark told on Improving Operational Effectiveness through IoT.

Formation of Silicon Students Council

The elections for all Class Representatives of Silicon Students Council (SSC) were conducted online. On 2nd December 2020, the election for the Secretary General was conducted and Ms. Subha Snigdha from 7th semester CSE was elected as the Secretary General of the SSC. On 7th December 2020, the Council had their Oath Taking Ceremony.

Orientation and Induction Program for 2020 Admission Batch



The Orientation Program for the 1st year B. Tech. was conducted online on 9th December; the Welcome Function was conducted on the same day afternoon.

The Induction Program for these students was conducted on 10th, 11th and 12th December 2020. There were routine sessions on Academics, Examinations, ERP Process and facilities along with six sessions by invited members. The activity sessions were not conducted this year.

Among the invited speakers we had Prof. Shraddha Padhi, KSOM, Bhubaneswar who spoke on Mental Well-being. Prof. Sunil Kumar Sarangi spoke on “Students' Responsibilities in engineering/Technical Education”, Mr. Abhijit Sen spoke on “Building a Career”, Prof Kalyani Samantaray, Sri Sri University, spoke on Universal Human Values. Our Chairman interacted with the students and answered their queries. This was his first

interaction with our students. Students were very excited to interact with our Chairman. Five of our valued Alumni interacted with the students during the Alumni Talk.

NES 2020



The Department of Electronics and Communication Engineering and the Department of Electronics and Instrumentation Engineering of Silicon Institute of Technology, Bhubaneswar conducted a webinar on “Nanotechnology and Embedded Systems” from 15th to 17th December 2020 in collaboration with VLSI Experts. This webinar is the 2nd edition of NES 2019 conducted in December last year. The resource persons were Dr. Shivananda Koteswar R & D Head Synopsys, Bengaluru Evolution and Advancement, Dr. Vishal Sipani, Sr. Manager, Scribe Design Quality Micron, Hyderabad, Mr. Steve Hoover, Redwood EDA, USA, Mr. Rohit Sharma AITS, USA, Mr. Atul Bhargava, STMicroelectronics, Noida, Mr. Rajat Bansal, KeenHeads Technologies, Noida, Mr. Narasayya Donepudi, Sevy Multimedia, Noida, and Mr. Puneet Mittal, VLSI Expert Pvt. Ltd.

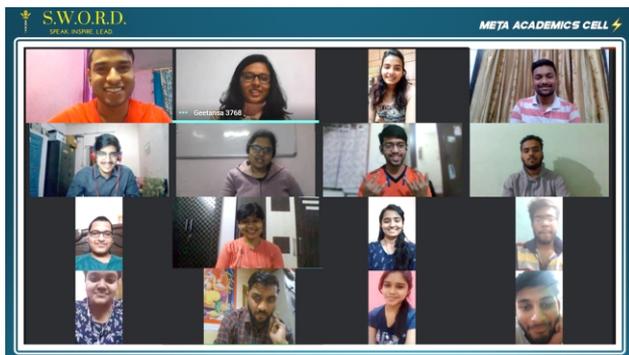
Research Award of Faculty Members



Five of our Faculty Members received the University Foundation Day Research Award from BPUT on its Foundation Day on 21st November 2020.

They are Dr. Pradyumna Kumar Tripathy in Computer Science, Ms. Debasmita Pradhan in Computer Science, Dr. Bodhisatvva Dash in Electronics & Communication Engineering, Dr. Ambarish Gajendra Mohapatra in Electronics & Communication Engineering, and Dr. Manoranjan Behera in Chemistry.

SWORD Sessions



Silicon Meta Academics Cell organized Weekly SWORD online sessions on various topics during October and November. There were different activities on a distinct theme to develop Oratory Skills, like Formal debate on the topic- Atmanirbhar Bharat: A new contingency or a renewed old flawed plan, discussion on the best book read during lockdown, discussion on the topic - Rewind 2020: A run down the memory lane, group discussion on - which Indian street food should become the National Street Food of India, impromptu speeches on given topics or pictures, etc.

12th Alumni Meet



The 12th Alumni Meet of Silicon Institute of Technology was conducted virtually using the zoom interface on 26th December 2020. Around 200 Alumni from different parts of the world joined the meet. Dr. Saroj Kanta Misra, Director graced the gathering with his humble words of wisdom followed by the talk by

Prof. Dr. Jaideep Talukdar, Principal and Dr. Sanjit Swain FIC, Industry Interface Cell.

The cultural segment of the event started with the song of 'Bande Utkal Janani' sung by alumni of the batch of 2009 to 2013. Odissi dances were performed by alumni Soumya Saswati Sahoo and P Gayatri. Some eclectic pieces of performance like beat-boxing, team DDX, SMC Band, instrumental such as piano and mouth-organ were exhibited besides dance performances.

Alumni shared their memories of college life, and an exquisite Campus tour video was played along with various fun activities.

Webinar on “Energy Efficient Distribution Systems” (EEDS)

The department of Electrical and Electronics Engineering in association with the IEEE PES chapter organized a webinar on “Energy Efficient Distribution Systems” from 8th Jan. to 9th Jan 2021. EEDS 2021 inculcated many new ideas towards smart distribution systems and smart transformers on different aspects of efficient energy management of new and existing distribution systems. The smart city and smart buildings concept were discussed. Dr. Saroj Kanta Misra, Director, and Dr. Jaideep Talukdar, Principal graced the inaugural session and emphasized the importance of energy efficiency. The session ended with a vote of thanks by Prof. Laxmi Narayan Pathy, HOD, Department of Electrical and Electronics Engineering. The esteemed resource persons for the webinar were Mr. Amok Agarwala from TPCODL, Dr. Hari Om Gupta, Director, Jaypee Institute of Information Technology (JIIT), Prof. A. K. Tripathy, FNAE, former DG, CPRI, Bangalore, Mr. Jayant Sinha from Spectrum Infra Ventures, and Mr. P. K. Pattanaik, GM, OPTCL. 193 participants from different academic institutions and industries joined the webinar. There were 3 online lucky draw prizes for all. The webinar ended with a vote of thanks by Dr. Ram Prasad Panda.

Open MIC 2021 by the Meta Academics Cell

The annual literary and musical event Open MIC 2021 (Version 3.0) was organized on 16th January 2021 on an online platform. A total of 184 students attended the event while 14 contestants went through the first round (screening round) and then the



final round along with the voting. Vivek Mohapatra (3rdYear) and Isha Bharadwaj (3rdYear) were the winner and runners up in the judge's category while Ritish Mohanty (1st Year) and Vivek Mohapatra (3rd year) were the winner and runner up in the voting category. Arpita Mohanty (2nd year) received the Women Achiever Award. Our alumni members, Subhangi Nayak and Shalini Mohapatra were the judges.

Republic Day Celebration

The Republic Day was celebrated on 26th January 2021. Dr. Saroj Kanta Misra, the director, hoisted the National Flag and addressed the gathering.

Silicon Super 7

Silicon Super 7, the intra Institute tennis ball cricket tournament was organized on 30th and 31st January 2021. There were 12 teams of the game formed from the hostel students. A team of seven players was selected, each, six from the 4th year, two from the 3rd year, one from the 2nd year and three from MCA. All matches were played with students umpiring. The team "The Crid-7" from the 3rd year was the winner and the team "Bullet-7" was the runners up.

Technology based Entrepreneurship Development Programme (TEDP)

The Entrepreneurship Development Cell, Silicon Institute of Technology conducted a six-week-long Technology-Based Entrepreneurship Development Programme (TEDP) from 12th Feb - 27th March 2021 sponsored by NSTEDB, Govt of India. It was conducted in a virtual mode due to the

COVID Scenario., Prof. Jaideep Talukdar, Principal, Silicon Institute of Technology graced the inauguration. The programme coordinator Dr. Mahendra Prasad Agasty highlighted the programme objectives. The objective of the program was to encourage young technocrats to take entrepreneurship as their career. The interest shown by applicants to attend the program was quite encouraging, but 25 out of 90 applicants got the opportunity to attend the training. Renowned resource persons, including trainers, faculty members from reputed management schools, bankers and different government agencies, taught the various aspects of entrepreneurship to aspiring entrepreneurs. The participants were provided with hands-on training in indigenous technologies development with R&D institutions that are available for commercial exploitation.

Women Entrepreneurship Development Programme (WEDP)

Women Entrepreneurship Development Programme(WEDP) was organised by the Entrepreneurship Development Cell, Silicon Institute of Technology from 20th Feb -20th March 2021 sponsored by NSTEDB, Govt of India. On the inauguration day, Prof. Jaideep Talukdar, the Principal of Silicon Institute of Technology, inaugurated the event and programme coordinator Dr. Mahendra Prasad Agasty spoke about the objectives of the programme. Dr. Chidatmika Khatua, a successful woman social entrepreneur, motivated the participants and Mr. Bhabani Shankar Pani talked about the importance of the programme. As per his views, the Indian economy is growing every decade and start-ups are turning out to be the primary engines driving this growth. Despite being the third-largest start-up nation and having over 27,000 start-ups, India still has only 5 women start-up founders. This figure highlights the multi-layered challenges faced by female entrepreneurs. Such training programs will help and encourage the women who are interested in taking entrepreneurship as their career.

Aurabinda Misra Memorial Open Quiz 2021

The Aurabinda Misra Memorial Open Quiz 2021 was organized by the Silicon Quiz Club on 7th February 2021. It was an online event open for students at the national level. There were 140 teams

(teams of two) for the preliminary round. Dr. Adarsh Kumar Mohapatra and Mr. Ritwik Tripathy were the quiz masters. The winner's team are as follows. Ayuj Consul, 3rd year, Television Writing and Production, Chapman University, CA, USA and Pranava Dhar, 1st year, Cognitive Science, Yale University, CT, USA team was the winner. Aditya Tiwari, 1st year, BA (Economics), Ashoka University, Sonapat, Haryana and Abhiraj Singh, 1st year, BA (Economics), Shri Ram College of Commerce, Delhi University, team was the 1st runners up. Sonal Sharma, 2nd year BA (English), Miranda House, Delhi University and Amlan Sarkar, 1st year MA (Sociology), Delhi School of Economics, Delhi University, team was the 2nd runners up.

Industry Visit by Students of M. Sc. Data Science

An industry visit for the first-year students M.Sc. Data Science was organized on 19th February 2021 accompanied by faculty members. The team visited Aceso Cloud company premises and interacted with several employees. This was followed by an educational talk from a senior software engineer on Data Science and its usage in today's industry. The Director of the company, Mr. Mohar Manohar Mishra, also interacted and advised the students on their career in the Data Science area in the Software Industry. The tour was highly informative for the students.

Staff Award Function



The Staff Award function was organized on 6th February 2021 by the Staff Welfare Committee. The long service awards for 20 years, 15 years and 10 years were awarded to staff members. Faculty members who were awarded Ph. D. in the year 2020 were also felicitated during the program. The employee of the Quarter, recognition for the employees for their contribution, innovation and dedication was

announced for the first time. Three employees, one each from Teaching, Technical and Administrative staff were selected for the quarter from October to December 2020. There were cultural events exclusively by the staff members.

Webinar on Machine Learning and Applications on 4th to 6th of March 2021



The department of CSE, Silicon Institute of Technology, organized a three-day webinar on Machine Learning and its Applications from 4th to 6th March 2021. The domains of machine learning, its industrial applications, solving problems using Machine Learning were discussed during this webinar. Regression Problems in Supervised Learning, Explainable Machine Learning, Quickest Change Detection and Unsupervised Learning were the most interesting topics covered in the programme. Dr. Bighnaraj Panigrahi (Associate Consultant, TCS Networks Innovation Lab), Dr. Hemanth Kumar Rath (Senior Scientist, TCS Networks Lab), Er. Sumanta Patro (Researcher, TCS Networks Lab), Dr. Siba Narayan Swain (Asst. Professor, IIT Dharwad), Dr. Vineeth N Balasubramanian (Department Head, AI, IIT Hyderabad), Dr. Taposh Banerjee (Asst. Professor, University of Texas) and Dr. Ashish Ghosh (Head, Machine Intelligence, ISI Kolkata) were the eminent speakers for the webinar. 190 participants consisting of industry professionals, faculty members and students had enrolled for the course. The sessions were extremely appreciated by the participants. In the end, a quiz was conducted. Based on quiz marks, attendance and feedback, 119 participants were provided e-certificates.

SITMUN

The third edition of SITMUN was conducted from 12th to 14th March 2021. The conference had 80



participants, 30 members as Organizing Committee, 6 members as Executive Board. Among the participants, 50 students were from Silicon Institute of Technology, Bhubaneswar and 30 were from outside colleges. Retired Col and Psychologist (Dr.) Satya Narayan Ray was the chief guest for the opening ceremony. The conference had 2 committees and 1 International Press. There were cash prizes in the various categories such as Best Delegate, Outstanding Delegate, High Commendation, Special Mention, Honorary Mention and Verbal Mention.

Women's Day Celebration



The Women's Day Celebration was organized by the SAGE-'W' cell on 13th March 2021. The theme of the function was CHOOSE TO CHALLENGE. The function started with an Inaugural Song by students followed by the address of Prof. Jaideep Talukdar, Principal and Prof. Jayshree Das, Dean Research. The speakers were Dr. Adyasha Das, Associate Professor, IITTM, BBSR and Shri Surendra Kumar Sahoo (OFS), Comptroller of Finance, Utkal University.

There was a panel discussion followed by the talk of the speakers. The program continued to remain lively with performances by our students. A few achievements (like Medhavi Chatra Award, Navonmesha Award, and Udyamita Award) and Women Achiever for the year 2020-21 were

recognized through prize distribution. Around 90 participants attended the program.

Institution Award for Ms. Manorama Swain

The Institute of Engineers India (IEI), Odisha State Centre has awarded Ms. Monorama Swain with the Institution Award on 28th March during its 62nd Technical Session for the technical paper "Automatic Classification of Discrete Emotions In Various Dialects Of Odia Speech" jointly written by Ms. Monorama Swain, Prof. A. Routray and Prof. P. Kabisatpathy.

Prayas

"Prayas The Pursuit of Campus Placements" was organized by ISTE Students Chapter in association with CodeChef Silicon Chapter and powered by the Industry Interface Cell. The program was organized to eradicate the fear of placements from students. The event was open to the 2nd and 3rd-year students and approximately 95 students participated in the first round i.e. Written Test. Finally, ten students got selected as winners.

Plastic Waste Free Campus Campaign

The Silicon Green Club (SGC) had conducted a plastic waste-free campus campaign inside the Silicon campus on 20th March 2021. Many students participated in the event. The areas primarily covered during this event were the new academic building area, library and cafeteria.

FMET-2021



The Department of Basic Sciences and Humanities had conducted a four-day webinar on the 'Functional Materials for Emerging Technology' from 2nd to 5th March 2021 under BPUT sponsored TEQIP

III programme. There were nine speakers namely Dr. Sashi Satpathy, University of Missouri, USA; Dr. Sachindra Nath Sarangi, Institute of Physics, Bhubaneswar; Dr. Satender Kataria, RWTH Aachen University; Dr. Prasanna Kumar Sahoo, IIT, Kharagpur; Dr. Subhankar Bedanta, NISER, Bhubaneswar; Dr. M. Ghanashyam Krishna, University of Hyderabad; Dr. S. D. Mahanty, Michigan State University, USA; Dr. Bikash Kumar Jena, CSIR-IMMT, Bhubaneswar and Dr. Yogendra Kumar Mishra, University of Southern Denmark. The topics on which the talks were delivered are Hall effect in condensed matter physics, Material science and nanotechnology, Opportunities and challenges in emerging low-dimensional nanomaterials, Two-dimensional materials for neuromorphic applications, Exploring nanomagnetism via anisotropy, architecture and interface engineering, Prospects of machine learning in functional material design, Materials for energy conversion and storage applications and 3D tetrapod based smart materials for advanced technologies. There were 190 students and faculty participants for the program.

STTP on Professional Ethics and Human Values



SiliconTech organized an AICTE sponsored six-day Short Term Training Programme on “Professional Ethics and Human Values” from 22nd to 27th March 2021. Participants were from different industries and AICTE approved institutions across India. Prof. Jaideep Talukdar, Principal, SIT, inaugurated the event. Dr. Mahendra Prasad Agasty, Programme Co-ordinator delivered the orientation talk followed by the Chief speaker, Dr. Tapan Kumar Chand, Former Managing Director NALCO and BALCOAND. The Chief Guest of the session was Prof. Neharika Vohra, Vice-Chancellor at Delhi Skill and

Entrepreneurship University. Eminent speakers from varied areas had delivered brilliant deliberations in the programme. Valued speakers for the STTP included Dr. Rooplekha Khuntia, NISER, Bhubaneswar, Prof. Aditya Mohanty, Utkal University, Dr. Vijaya Lakshmi Mohanty, Sri Sri Advanced Global Center for Conflict Resolution and Peace Studies, Prof. Prof. Dhaneswar Sahoo, Govt. College, Odisha, Pratap Kumar Rath, Utkal University, Swami Achalananda Giri, Kriya Yoga, Prajnana Mission, Dr. R. K Biswal, NIT, Rourkela, Dr. S. K. Kar, CTTC, Bhubaneswar. In the valedictory session, Prof. S.P. Adhikary, Former Vice-Chancellor, F.M. University, was the chief guest. Dr. Saroj Kanta Misra, Director, Silicon Institute of Technology and Dr. Mahendra Prasad Agasty expressed thankfulness to all for making the programme a success.

New Minds

Mr. Dayal Kumar Behera has joined as "Assistant Professor" in the Computer Science & Engineering department. He holds an M. Tech. degree (in Computer Science & Engineering) from CET, Bhubaneswar. He has around 13 years of experience in academia. His specialization is in the 'Data Science' domain.

Ms. Swarupa Roy has joined as "Assistant Professor" in the department of Basic Sciences & Humanities (Mathematics). She holds an M. Sc. degree (in Mathematics) from Banaras Hindu University, Varanasi (a gold medalist in 'Geometry') and an M. Phil. degree (in Mathematics) from Utkal University, Bhubaneswar. She is currently pursuing her Ph.D. at Utkal University, Bhubaneswar, where she has been working as a 'Research Scholar' since 2016. She has around 9 years of experience in academia.

Ms. Debahuti Paikaray has joined as "Assistant Professor" in the department of Basic Sciences & Humanities (Mathematics). She holds M. Sc. (in Mathematics) and M. Phil. degrees (in Mathematics) from Utkal University, Bhubaneswar. She is currently pursuing her Ph. D. in Utkal University, Bhubaneswar. She has around 10 years of experience in academia.

Mr Avishek Mishra has joined us as "Electrical Engineer" in the department of Establishment. He has completed his B. Tech. (Electrical) degree from JIS College of Engineering, under West Bengal University, after completing his Diploma from Calcutta Technical School. He has around 10 years of experience in different Electrical Project based organisation.

In spite of the Covid-19 pandemics and the resulting lock downs in the educational institutions across the country, SiliconTech continued with the virtual placements for the 2021 graduating batch. Here are the placement drives that were conducted.

Infosys declares final results of HackWithInfy

Infosys declared the final results for the third edition of India-wide hackathon contest HackWithInfy for the 2021 graduating batch and 8 students from Silicon got pre-placement job offers. These selected programming polyglots from HackWithInfy have also got a chance to upgrade their offer for niche roles in Infosys with higher LPA. The selected students are:

Sl. No	Name	Branch
1	Ankita Das	CSE
2	Deepak Kumar	ECE
3	Kamaljeet Mallik	CSE
4	Medha Raj	CSE
5	Navin Chandra	CSE
6	Prateek Ram	CSE
7	Sachin Kumar Rawani	CSE
8	Utkarsha Kousik	CSE

CodeVita Season 9 Results

TCS declared the results of the global programming contest CodeVita Season 9 during October 2020 and we had 11 students from the 2021 graduating batch who got job offers. CodeVita by TCS has been an attempt to promote programming as a fun filled activity at the global level since its inception.

SiliconTech had 5 top performers from TCS-NQT 2021 exam who got the opportunity for the TCS Digital interviews and were selected for a package of 7LPA. The following students were finally recruited:

Sl. No	Name	Branch
1	Ayush Poddar	CSE
2	P Digvijay	CSE
3	Prateek Ram	CSE
4	Rachit Pattnaik	ECE
5	Siddharth Chakraborty	ECE

Infosys Virtual Recruitment Drive

Infosys, a premiere Shared Day 1 Recruiter at SiliconTech over the years, continued with the legacy

by conducting the virtual on-campus drive for the 2021 graduating batch. Eighty Six candidates from SiliconTech and Silicon West were selected after successfully completing the virtual interviews.

Wipro Virtual Recruitment Drive

Wipro visited SiliconTech as a trusted Academic Partner and conducted a virtual Shared Day-1 on-campus drive for the eligible 2021 graduating B.Tech. students for both the campuses, SiliconTech and Silicon West. From those who appeared the technical and HR interviews in virtual mode, 111 students were finally selected (108 from SiliconTech and 3 from SiliconWest).

SiliconTech had 12 B.Tech students from the 2021 graduating batch who successfully completed the TalentNext Certification module and have been selected by Wipro. TalentNext is a collaborative industry-academic module from Wipro for its selected Academic Partner colleges being offered to the B.Tech. students by Wipro Certified Faculty (WCFs) from the respective colleges.

Cognizant Virtual Recruitment Drive

Cognizant, world's leading professional services company, determined to work with young talents to build a digital future, visited SiliconTech for a virtual on-campus recruitment drive. The virtual drive hired digital talents of tomorrow or "Generation Cognizant" divided into two categories 115GenCs with 4.5LPA and 4 GenC Nexts with 6.75LPA.

Hexaware Virtual Recruitment Drive

Hexaware, a fast-growing automation-led next-generation service provider delivering excellence in IT, BPO and consulting services and built around the strategy "Automate Everything, Cloudify Everything, Transform Customer Experiences", conducted a virtual drive for the 2021 graduating batch B.Tech. and MCA students and selected 15 B.Tech. students with fulltime offer (14 with 3.5LPA while 1 with 5LPA).

SysCloud Virtual Recruitment Drive

SysCloud, a premiere Machine Learning Analytics Software house offering solutions to its customers to protect data loss and Cyber threats through Cloud backup and Security, conducted a virtual on-campus recruitment drive at SiliconTech and selected two students from CSE and ECE branches for internship-cum-placement with 25K stipend per month and a 6 LPA offer.

Rewoke Technologies Virtual Recruitment Drive

Rewoke Technologies, a full-stack product developer ensuring smooth digital future, selected one candidate from ECE branch at SiliconTech who had joined them as an intern from July 2020.

Aptus Data Labs Conducts Placement Drive

Aptus Data Labs, an advanced data analytics company dealing with data, cloud platform, AI & ML technologies in providing solutions across domains like Manufacturing, Supply Chain, Retail and Consumer Products, Banking and Finance visited SiliconTech for an on-campus virtual interviews. 8 students from CSE and ECE branches were selected for an internship-cum-placement with a 15K stipend per month and 5.10LPA offer.

VVDN Technologies Recruitment Drive

VVDN Technologies, Product Engineering & Manufacturing Company developing products across several technology markets (Voice, Video, Data and Network), visited SiliconTech for a virtual recruitment drive. Four B.Tech students from core branches were selected for internship-cum-placement with 10K stipend during internship and a CTC of 3.2LPA.

Qvantel Recruitment Drive

Qvantel, a leading digital transformation platform adopting modern-technology for maximum efficiency in cloud-based Business Support Solutions (BSS), selected one student for internship-cum-placement with 12K placement during internship and a CTC of 4LPA.

Felix Healthcare Recruits One

Felix Healthcare, an AI start-up working in healthcare domain, selected 1 student from the 2021 graduating batch with 15K stipend and 5LPA package.

Cozentus Technologies Recruits Three

Cozentus Technologies Pvt. Ltd., a company focused on providing IT solutions using emerging technologies, selected 3 B.Tech. students from the 2021 graduating batch through a virtual recruitment drive for internship-cum-placement with a 7.5K stipend and 4LPA offer.

Spikewell Recruits Six

Spikewell India Pvt. Ltd., a fully owned subsidiary of USA which has transformed from a Block chain app owner to multiple clients data

transformer, selected 6 B.Tech. students from the 2021 graduating batch at SiliconTech for internship-cum-placement with 20K stipend for 6 months and 8LPA package.

Sevy Multimedia Technologies Hires Three

Sevy Multimedia Technologies, a reputed core company selected 3 B.Tech. students from SiliconTech. Sevy Multimedia deals with products and solution Development for Web, Mobile & Enterprise and has been recruiting our students for the last three years.

Maventic Innovative Solutions Recruits Two

Maventic Innovative Solutions Pvt. Ltd., a SAP services company developing niche market IT products in industries like pharmaceutical, consumer goods, retail and discrete manufacturing, conducted a virtual on-campus drive and selected 2 B.Tech. students from SiliconTech.

Mindfire Solutions Selects Thirteen Interns

Mindfire Solutions, an expanding IT house from the Silicon valley in Odisha, conducted a virtual recruitment drive at SiliconTech and selected 13 B.Tech. students from CSE stream for 6 months internship with a stipend of 16000pm.

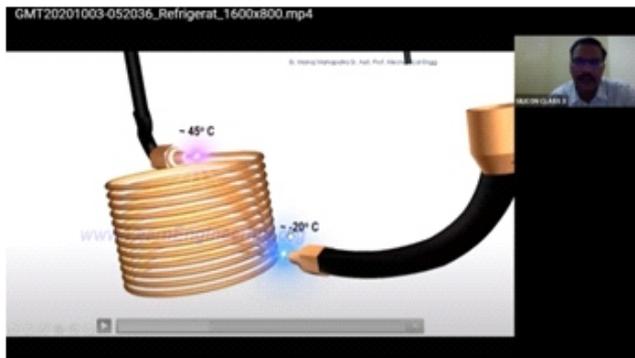
Abzooba Recruits One

Abzooba, having demonstrated expertise in developing and deploying AI applications, conducted a virtual on-campus drive for the 2021 graduating CSE and ECE B.Tech students at SiliconTech. One student was selected for the role of Software Developer with a 5LPA offer.

Launch of Practice School

Silicon Institute of Technology launched Practice School for its final year students, the first of its kind in the whole of Eastern India, on 20th March 2021. Practice School is a remarkable concept prevalent in top notch undergraduate schools in India and abroad. The program aims to bridge the gap between the industry and academia. It opens up a host of new opportunities for Siliconites to get hands-on project experience and industry exposure, and acquire pertinent skill sets. Speakers of repute from various industry domains addressed the students, with their encouraging and motivating words. SiliconTech looks forward to the success of this novel initiative.

Webinar on Refrigeration Engineering



A State Level Webinar on “Refrigeration Engineering” for Diploma Engineering students in the discipline of Mechanical Engineering was organised by the Department of Mechanical Engineering on 3rd October 2020. Mr. Manoj Kumar Mahapatra, Senior Assistant Professor, ME, SIT SBP reflected upon the focus area of the webinar and also steered this programme as an academic outreach programme of the institute.

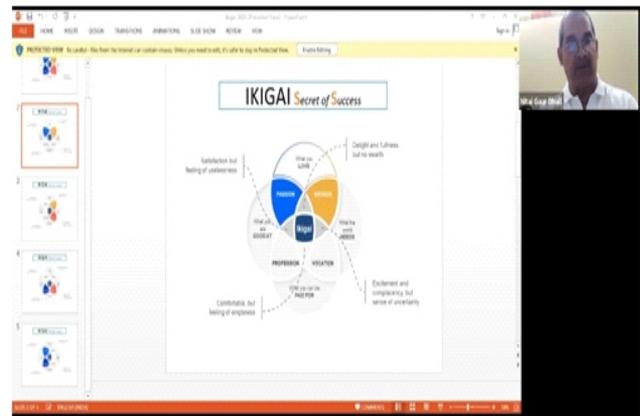
Orientation Programme



The Orientation Programme for the Batch 2020-2024 was held on 2nd December 2020 through Zoom Webinar. Prof. (Dr.) P. K. Mishra, Director, SIT, Sambalpur delivered the Welcome Address and encouraged the new batch of students to make the best use of their time to get the best out of the professional education. Dignitaries gracing the occasion were Prof. (Dr.) Ramaprasad Panda, Principal, Prof. (Dr.) Enakshi Das, Dean. Detailed presentations were made on Academic Rules, Regulations and Amenities at

Silicon Sambalpur. The role of Faculty Advisors and the ERP system to help the students access academic as well as administrative activities through the dedicated ERP portal was highlighted. The meeting came to a closure with a vote of thanks proposed by Ms. Ankita Panda, FIC-Academics. Afterwards Faculty Advisors for first year students had interactions with respective groups of students through zoom webinar.

Induction Programme



The Induction Programme for the 2020-2024 batch of students began with a Motivational-cum-Expert Talk by Mr. Damodar Sahu, Head of Digital Strategy, Manufacturing Business Unit, Wipro, USA on 3rd December 2020 through zoom webinar. Mr. Sahu reflected upon the new age technologies and the future of Information Technology. Students with many relevant and pertinent questions to the resource person made the talk a grand success. This session was followed by a quiz on general knowledge. Mr. Rajeev Jha, an alumnus of Silicon Sambalpur, presently working as Operations Engineer at Microsoft, Bangalore shared his thoughts on how to pursue a career path with the newcomers on 4th December which was followed by an online Debate Competition. Subsequently, on 5th December 2020 Ms. Ankita Panda, FIC-Academics delivered a talk titled 'Crossing the Bridge' to help the students pass through the two weeks of Bridge Courses which were in the offing.

Mr. Nitai Gaur Dhall, Chairperson, Governing Body, SIT, Sambalpur delivered a Motivational Talk on 19th December 2020. The Induction Programme came to a closure on 19th December 2020.

Ms. Swarupa Roy, is an Assistant Professor in the department of Basic Sciences & Humanities (Mathematics) who holds M.Sc. and M.Phil. degrees in Mathematics and is currently pursuing Ph. D. in Utkal University, Bhubaneswar. In this interview taken by Isha Bharadwaj of 6th Sem. CSE,



Ms. Roy talks extensively about her keen interest in Mathematics and her field of research.

Isha : Ma'am let's talk about your field of interest; Mathematics is a seldom chosen subject for research. What was your reason and inspiration in choosing this field?

Ms. Roy : Since my childhood logic and analysis always fascinated me. The world runs on Mathematics; there are patterns and reason in everything. To understand Mathematical problems and solve it in different ways was the kick-start for me to start my love for the subject. Since then, I never found myself loving the subject any lesser.

Isha : Can you briefly tell us about your PhD topic of research in "Operator Theory"?

Ms. Roy : Operator Theory is a branch of functional analysis which includes the study of linear operators on function spaces. Operator theory is a broad field having innumerable applied and theoretical facets. It is deeply connected with complex analysis, functional analysis, mathematical physics, and electrical engineering, to name a few.

My research is to deal with bounded operators defined on various reproducing Kernel Hilbert Spaces of Analytic and Harmonic functions. Despite considerable effort, there are few classes of operators in infinite dimensional Hilbert spaces which

are fully understood. Toeplitz, Hankel and composition operators are classes about which much is known yet many questions remain unanswered. The theory of these operators on the Bergman spaces and weighted Bergman spaces is less understood and the results are very often strikingly different.

Isha : You have done your M.Sc. in Mathematics from Banaras Hindu University, Varanasi, and you completed your M.Phil. and continuing PhD from Utkal University, Bhubaneswar. How would you describe the difference in study culture between these places?

Ms. Roy : The most alluring aspect that I have noticed in all the academia I have visited, was the language of Mathematics and the unconditional attachment for it is constant in all of them. In Banaras Hindu University, there is an inclination towards going to civil services after completion which is evident in the way they handle their day-to-day course; however, in Utkal University, people are more academic.

Isha : What advice do you have for students who aspire to pursue a career in Mathematics?

Ms. Roy : The study of Mathematics in any individual strengthens the power of problem-solving skills, reasoning, abstract/spatial thinking, creativity, and also the communication skills to some extent. It is a hierarchical subject where learning depends critically on earlier learnings and students have to perfect their technique at each lower level before progressing to the next level. Students have to understand why and what is happening to feel the problem to solve it not by merely memorizing the solution. I wish them all the very best.

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.

Death of a Life

They lived in the waterfront
 Just the way they had sworn
 But they aren't the same today
 As they were, the day they were born
 The waters of their lovely life
 Had turned red
 From the larger violence in their little hearts.

It was early September
 And the clouds started to mourn
 She sat by the window
 As he got busy tuning his chords
 Her eyes hovered from the subtle sunbeam
 To the drops rolling down from leaves
 Her hand resting on the window frame
 Could feel the cold winds
 That brought along the smell of petrichor with them
 This, was the moment when she tamed her angst
 And she closed her eyes
 She imagined a world where she could die
 Years before she was born
 Where time river didn't play by physics
 And its little laws
 She thirsted for the anecdotes
 And their little flaws
 To begin again
 Back from the days when they were seven years
 older than ten
 Yes, it was a long way down the hill
 A peak no one has ever climbed down and still
 The bullets needed coiling back to guns.
 Bodies of affection
 Buried in silence
 Battles of opinions that perished them all
 Needed rising back from their graves.
 Embracing a cold fire in this world
 Would heal their tormented souls down
 Waves that once vandalized their castles
 Would now pervade their feet with sand.
 Shaking, whirling as she imagined further
 The mockingbird sitting on a shaking branch

Was flipped back to her nest
 Which she departed never to return
 The drops rained back to clouds,
 The tears rolled up to her eyes.
 A part of her mind reminisced the night
 They spent under the Milky Way
 Their skin glowed
 Yellow, and returned the camp fire, the heat it owed
 As she got lost in a trance
 Moments after they started to dance
 As he played inverted songs of Psithurism.
 And then, she opened her eyes
 Thrown back to a world
 Where thunderstorms raged
 But couldn't smother fires within
 Rather burnt the Trees of Lives
 That could be lived
 But perhaps, We All Die.

Swaroop Pany
CEN, 2nd Sem.

Engineering Problems

What are you going to opt for your Higher Education?

“I think I should opt for Engineering”. This is the most common answer we hear from students. We are in the 21st century and as the tech stuff grows, the number of engineers especially in India grows rapidly.

According to studies, India produces 15lakh engineers every year from 4000 institutes, which is more engineers than produced in USA and CHINA combined. This may be due to the fact that many of our youngsters are not aware of different career opportunities we have and what and which one they may fit into. We can, to some extent say that till now our schooling has not come up to that state in which they can teach the students how to choose right career paths rather than just taking theory classes.

Earlier, engineering was the most respected career in India. But today we have at least one engineer in every Indian home on an average. As we all know, when something gets in excess, its value degrades.

Engineering is a beautiful profession which have the power to change the world, but we pursue it with the motivation of earning money alone rather than using it to its full potential.

Stated below are some real engineering problems:

Lack of Jobs

The ratio of the number of engineers produced in India is inversely proportional to the number of jobs generated for these professionals. Due to this out of those 15 lakhs engineers, only 2.5 lakhs graduates land on relevant jobs in technical domains. Many engineers are observed to change their fields and opt for a master's degree in other fields, which is totally different from the field in which they are graduated. ... just to get a job.

Lack of Practical Knowledge

This is a serious concern, less than 1% of engineering students participate in Internships and just 15% of Engineering programs are offered by NBA. In this era upskilling is very much important. All these problems arise due to lack of skills.

The Engineering curriculum in India is basically focused more on theoretical aspects rather than imbibing practical knowledge in students. Students are not going to use physics or chemistry formulae for the rest of their entire life. I accept that they are very much important for our overall development but its importance lies only in its own domain (No Offence).

Due to theoretical aspects, studying the subjects becomes boring and non-exciting after a point and gets stagnant for the students. The Indian Education System measures the knowledge on the basis of exams only. Due to this the students are heavily bombarded with these so called "Competitive" exams. We all might have got a flash about that most famous three lettered exams. Judging students just on the basis of marks has now became old criteria.

Lack of Quality Teachers

There are more than 4000 colleges in India Granting Degrees. There are not enough quality teachers for all these educational institutes. A good teacher is not one who has stacks of degrees and

certificates but one who teaches each and every aspect in both practical and theoretical manner. This only comes when a person who has opted to teach has done so because of its passion and not just earn a livelihood. A bad teacher not only risks its own future but also hundreds of student's lives.

If we try to solve all the above defects we may end up in vain but if we can somehow change ourselves, we can gain the potential of changing the defects. So, let's not play the Blame Game and try to achieve something which is higher than our name, aim and our whole life game. These problems are literally very serious and should be pondered over. If we became successful in solving these problems, then our journey to success becomes smooth.

Sandeep Nayak

CEN, 2nd Sem.

Life and its Versatility

Waking up to see the clock

Only if it's time to work!

Life is just like railway tracks

With no ends, just speed and cracks.

Everyone was busy in the race to earn

And forgot that each day had something to learn.

Time went on and passed by

And days ended with hello and goodbye!!

Sense of life had started to dwindle,

As if Humanity and emotions were heavy to handle.

Impotent to measure the imbecility of Mankind

Nature decided it's Time to rewind!

Along with 2020 came a Pandemic

That led everyone Home and roads without Public.

There has been losses, struggles and challenges

Yet Nature had kept some hidden messages.

Meanwhile families firmly flourished,

Kids helped their mom and moral bonding
established.

Engrossing on ourselves, our hobbies, our passion

We've got new things to learn & lots of fun!!

Humanity's raised, there has been help for the poor

Somehow pollution too has scaled down to lower.
Any juncture the jeopardy of the Pandemic is cured
Let's not leave behind the positivity we procured.

Let's collect, keep and nourish them in Soul
That's the best thing having earned Nature's goal
Life is just like railway tracks
With no ends just speed and cracks
Why not transform it into a Garden seamless?
With Humanity, Life and joy-filled essence!!

Abhipsa Bhujabala
CSE, 4th Sem.

“Tech Fever”

Technology is amazing
It's advancing the world
But is it ruling over us?
And causing our lives to swirl!?

A smartphone can guide you
With information & more
But in hard times it's a friend
That will give you a shoulder for sure

The technology with advances
And gadgets will change
But it's your friends and family
That always remains

We are drowned in your gadgets
And lost all within
The real world is the people around
Not the gadgets there in

It is an addiction today
Of this tech receiver
In simple terms
It's technology fever...

Ayush Raj
CEN, 2nd Sem.

The Invasion

It's such an ignominy the lands are left untrodden,
After thousands of years, they've been forgotten.
Everyone fled in a vain hope to survive.
There are no humans left alive.

Yet the brooks babble on, soprano and bass
But otherwise, it's silent in the beautiful space.
The clouds clutter like cotton above the grassy fields
And the mountain ridges stand strong as warriors'
shields.

The waves of the sea sway gently in the breeze,
While the doves sleep peacefully high up in the trees.
All around the animals freely wander,
Be it in their birth land or over yonder.

From the smallest shadows to the rippling reflections,
Everything around seems to be of the highest
perfection.
A beautiful face is the perfect deception.

The invasion was unexpected,
And was completely undetected,
But in the end,
It left the human race dead.

Before they could think, the Souls were upon them.
Before they could run the Souls had caught them.
Before they could breathe the Souls had destroyed
them.

The Souls took over them all.
It's such a shame the lands are left untrodden,
After thousands of years, they've been forgotten.

Everyone fled in a vain hope to survive.
There are no humans left alive.

Ritish Mohanty
ECE, 2nd Sem.

The Placebo Effect

In 1996, around 56 volunteers took part in a study to test a new painkiller, called 'Trivaricaine'. Two of their index fingers were taken and on one, the new, untested painkiller was rubbed, while the other one was left bare. Then, both were squeezed in painful clamps. The volunteers revealed that the finger, with the painkiller applied on it hurt less than the other one.

It shouldn't be a surprise, except the Trivaricaine painkiller was nothing but a faux concoction with no pain easing properties at all. It was not really a painkiller. Which brings us to the real question, how did the students feel a difference in the pain levels, when no actual painkiller was used?

The answer lies in the Placebo Effect - an unexplained phenomenon where, drugs, treatments, and therapies that aren't supposed to have an effect, miraculously make people feel better. Doctors have used the term Placebo, when no real treatments worked, or when the person imagined their illness, and they were actually perfectly fine.

For Placebo's to be found convincing, they had to be used as replicas of actual treatments and medicines, such as sugar pills or a sham surgery. But Placebos also had another use- in clinical trials. By 1950s researchers were using Placebos as a standard test for new treatments. But nowadays, Placebo treatment is considered unethical. If the drug has an older version, then that version is used to compare with the newer drug, instead of giving the patients no drug at all and using Placebo effect, especially if the victim

has a serious ailment.

So, in simpler words, Placebo Effect is just a branch of Manifestation, and it has been scientifically proven that Placebo effects have a measurable change in your heartbeats, blood pressure and pain receptors, which is why volunteers in studies which test painkillers or pain tolerance might exhibit the most clear-cut signs of Placebo Effect. On the other side of the spectrum, lies the nocebo effect which is basically just the opposite of Placebo effect and a person can actually kill himself if he constantly thinks about how very ill he is or when he has this prejudiced notion of how he shouldn't be alive. A prime example is Rev.

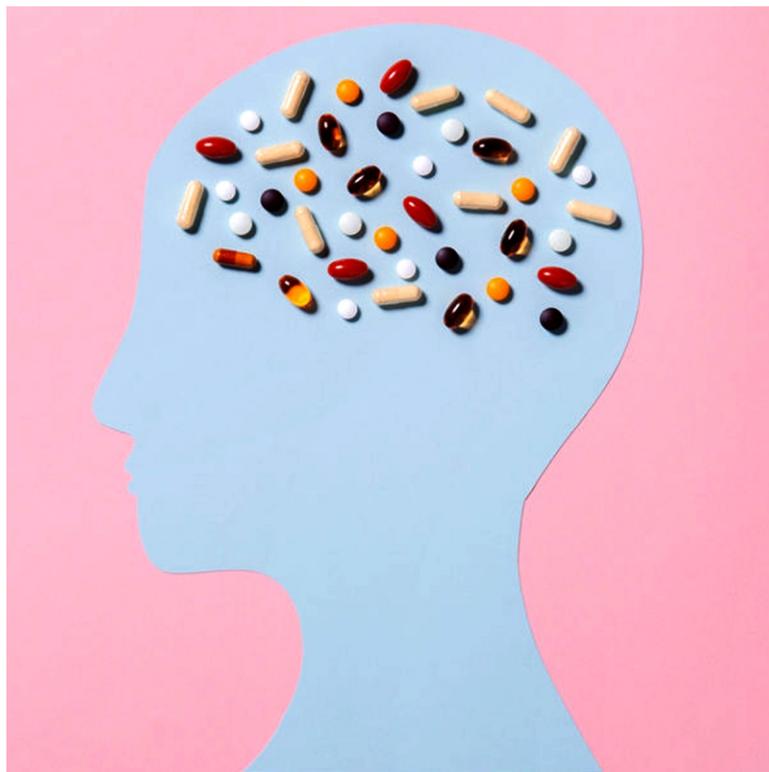
Arthur Dimmesdale in the book *Scarlet Letter* by Nathaniel Hawthorne, where his perpetual guilt and the burden of 'sinning' ultimately leads to his death.

Since the Placebo effect works, is it really safe to say that Manifestation works too? And not just manifestations but vision boards, affirmations and subliminal too? Is our mind really that powerful to grant us the things that we really wish for, and believe in just by

throwing it all out 'into the universe'? the power of our brains is apparently so infinite and limitless that it can cause us to recover from an ailment as is scientifically proven with nuanced observations and according to some people, Ariana Grande and Albert Einstein to name a few, can also attract and manifest the materialistic and emotional wants too.

Well, at the end, one thing that is definitely guaranteed, is that it's all in our head.

Ritish Mohanty
ECE, 1st Sem.



I am currently working in Tata Consultancy Services as a Data Engineer. Analytics is one of the most trending fields in the IT sector currently because of its power to forecast numbers and patterns in the future. Being fortunate enough to get a project in this field, has helped me to hone and sharpen my technical skills in extraction of data through SQL, and manipulation and visualization of the numbers using software such as domo and tableau.

In view of the chaotic pandemic last year, I decided to gain professional experience by joining TCS which plays an integral role in any fresher's career rather than take the risk of joining school at an uncertain time. This year I plan to pursue my Masters in Finance at the Carlson School of Management which is a part of the University of Minnesota, Twin Cities. My internship at Ernst & Young during my final semester gave me a lot of perspective of linking numbers to different problems we face. We know that money is the basis of finance, But what we tend to forget is that it is always numbers that make money. The fundamental solutions is to follow the analysis of them which in some cases may lead to a money trail by a terrorist or the sustainability efficiency of a country through carbon credits which in today's world has become a rage.

In order to pursue your Master's, two of the most popular exams are the GRE provided by ETS whose score allows you to any degree ranging from science to arts or even fashion and the GMAT by GMAC which is mainly considered for business programs for example MBA or the Master's in Management.

I started studying for the GRE in the month of May with my exam on June 6th, 2019. The earliest round applications were due in September 2019. In the beginning I had started preparing for the GRE on my own by ordering in the official guides, going through the type of questions. The exam tests your basic skills of mathematics, English and writing and most importantly your ability to concentrate which is why the key to it is practice rather than mugging up tons of formulae. To help me go through the last part of the practice phase I had subscribed to Magoosh which provides ton of questions to practice and also whole length tests.

I would love to get into research in the future following my mom's footsteps. During a conference last year, one of the speakers named Dr. Amit Bhattabal linked the pollution of the Ganges with the GDP of our



country. I am not particularly sure in which current topic I would pursue my research but it would be linked to sustainability in poorer countries based on their carbon credit output. Just a thought but we'll see how it goes.

My Message to the present Siliconites!

First, have as much fun as you can and want because the four year's will literally fly away like leaves. Cherish your friendships, sort out the differences you have among your groups or teachers and take sometime out for yourselves too. If you're planning on working, then you'll understand the value of weekends and free time.

Secondly have a clear picture of what you want to do moving forward. If you don't, that's also fine. Take some time, maybe months or even weeks, think about it, research on what interests and work towards it with focus.

And most importantly something that the pandemic has taught me is always have a plan B to back up your options.

K V D Pallavi

ECE, 2020 Graduating Batch

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Travel Diaries

Hailing from Bhubaneswar, the city of temples, I grew up admiring the intricate craftsmanship on the walls of these temples. The breath-taking sculptures always had me wondering about how the craft came to be as we see it today. And to quench the curiosity, I took a trip to the Sudarshan art and crafts village with a dear friend.

The craft village turned out to be a very interesting place. While I imagined it to be more of a museum showcasing the evolution of modern craftsmanship, there is more to it. The village, as the name goes, homes a workshop for sculptures, where the famous artist Shri Sudarshan Sahoo, the founder of the institution runs an ancient Gurukul system of learning.

Shri Sahoo, who is a graceful sculptor and a crafty designer, set up the village in order to preserve the art, and the craftsmanship. He keeps the glorious tradition of Odia art and sculpture alive. The village boasts a unique collection of his artistic works like intricate carvings.

As we strolled in the village, having been mesmerized by the breath-taking life-sized sculptures on show, we encountered a group of sculptors diligently chipping idols and giving the final touches to their masterpieces. And lo! There he was, Shri Sahoo, the Master Sculptor guiding his apprentices.

We were elated to have encountered the Padma Shri winner and rushed to him with numerous questions. He was elated to see two young women showing interest in the art of sculpture making and ushered us into his office for a chat.



As we enquired about his inspiration for setting up the craft village, Shri Sahoo shared that the hardship he went through to learn the craft, owing to his family background is what inspired him to establish an institution which shared the ancient craft without any barriers.

The enthralling day came to a fitting end as he gave us a tour of his personal works before we took his leave following an engrossing chat. The visit, which we took for a visual treat, turned out to be an enlightening evening with the maestro.

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Beware of Phishing !!!



Phishing is a type of social engineering attack in which the targets are contacted by email, text message or telephone to steal user data, including login credentials and confidential card numbers. The attacker poses as a legitimate institution and dupes a victim into opening an email, instant message, or text message. The recipient is then tricked into providing sensitive data or is exposed to ransomware attacks. The victim normally clicks on a malicious link, which leads to the installation of malware or revealing of sensitive information.

Though it's the organization's prerogative to keep the systems secured, patched and up-to-date, but individuals need to be vigilant as well. Here is a quick guide for things to watch for in a Phishing mail:

- Do not trust the display name of the sender. Look at the email address to confirm the true sender.
- Check for spelling errors and grammatical mistakes. Attackers are less concerned about the same.
- Look and hover the mouse over different parts of the mail. If the text appears suspicious or inconsistent in terms of font type and size, then don't click it, rather report it. It might be a Trojan.

- Examine the salutation. Is it general or vague? Like "Dear valued customer" is general, but "Dear [insert title here]" is vague.
- If the email is asking for personal information, then in all probability it's a Phishing Mail, coz legitimate companies will never ask for any personal information over mail.
- Beware of the urgency that these mails try to show, like, "immediately claim your million dollar reward" or "Important: your password will expire in 24 hours".
- Most authorized and legitimate senders will include the entire signature block at the end of the email. Look for that.
- Beware of the tricky texts and attachments like eBook PDFs or animated GIFs that the attackers use to make you open the malicious attachments; you will be opening the door for malware attacks.
- Anything out of the norm and out of legal boundaries should be immediately reported

In case of doubt contact the Security Cell or the Cyber Crime Cell of the concerned state.

Dr. Sushree Samita Rout
Associate Professor, CSE Dept.

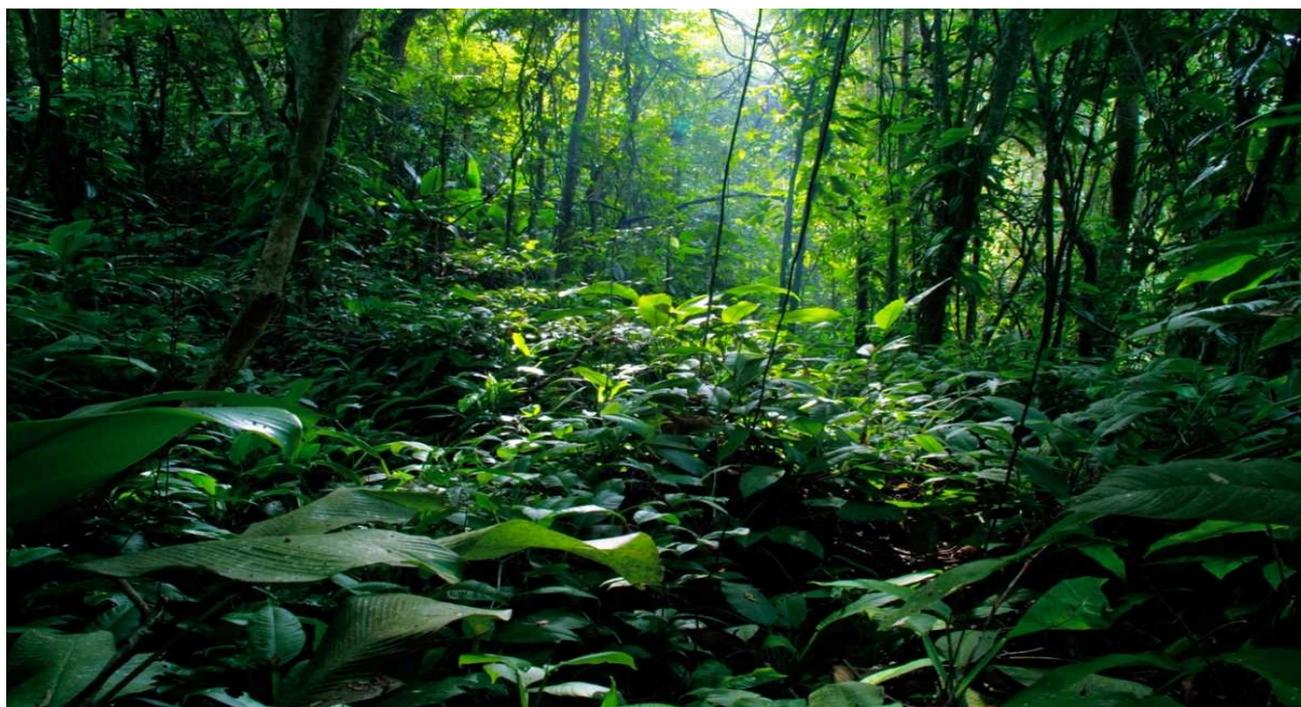
Biodiversity Hot-Spot

A biodiversity hot spot is a biogeographic region that is both a significant reservoir of biodiversity and is threatened with destruction. To be classified as a biodiversity hotspot, a region must have lost at least 70 percent of its original natural vegetation, usually due to human activity. There are around 36 recognized biodiversity hotspots in the world which represent just 2.4% of Earth's land surface, but they support more than half of the world's plant species as endemics (i.e., species found nowhere else) and nearly 43% of bird, mammal, reptile and amphibian species as endemics.

India hosts 4 biodiversity hotspots: the Himalayas, the Western Ghats, the Indo-Burma region and the Sundaland (Includes Nicobar group of Islands). These hotspots have numerous endemic species.

Sl. No.	Biodiversity Hot Spot	Hot Spots in India and their distribution
1.	Himalaya	a. Eastern Himalayas [West Bengal, sikkim, Assam, Arunachala Pradesh] b. Western Himalayas [Kumaon-Garhwal, Northwest Kashmir]
2.	Indo-Burma	a. North-Eastern India [Meghalaya, Assam, Tripura, Nagaland, Mizoram, Manipur] b. Andaman Islands
3.	Sundaland	Nicobar Islands
4.	Western Ghats and Sri Lanka	Western Ghats [Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu]

Source: Internet/Google



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