Highlights of the Issue

SPECIAL FEATURE:
Voices of Impact

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SLATE

Silicon Language for Arts Technology & Education

Our Vision: To become a center of excellence in the fields of technical education & research and create responsible citizens

From the Editor's Desk...

"Life is not about finding yourself, life is about creating yourself".

– George Bernard Shaw

A P J Abdul Kalam, the small-town boy of Rameswaram, eventually grew into the missile man of India and the most loved president of the country. Was it destiny which led him there, or it was his indomitable will power which helped him carve out a niche for himself? If one goes through the story of his life, ably recorded by him and Arun Tiwari in the book *Wings of Fire*, one finds that Dr. Kalam was faced with adversities all through his life. His poverty-stricken life, and lack of resources and opportunities could not seal his fate. The spirit to learn and move ahead with life to be an aeronautical engineer was but too strong in him to defeat his existing circumstances.

We can choose another world figure arbitrarily - Abraham Lincoln. We know the erstwhile American president was famous for his exquisite oratorical skills. But equally known are the circumstances in which he was brought up. Born in a one-room log cabin, President Lincoln hardly had any formal education. But he was bent upon educating himself. An undeterred Lincoln read avidly, consciously practiced oratory as a child and ultimately became a lawyer. Soon, a rhythmic clarity and persuasive structure stood out in his rhetoric, and made him the greatest orators in history.

The legends in both these stories reveal one thing – our personality evolves when we consistently work on it. It is crucial time for our precious students, who are here to become something with an a education, to understand the importance of this internal growth. They must hone their personalities which will make them unique in their chosen fields tomorrow.

Our best wishes are with them.

Dr. Priyambada Pal
Sr. Assistant Professor, BSH

EDUCATING US

The Language of Cinema: How Movies Communicate Visually

Have you ever watched a movie and felt deeply moved by it? This emotional connection with the audience is not only through dialogues and words spoken by characters. Movies communicate through images, colours, music and emotions, creating meaning without depending entirely on words. The language of cinema is universal and emotionally powerful. Unlike books which rely on written descriptions, films use visuals, sound, colours and music to tell stories. These elements connect with people across the world and allow perspective to travel across cultures.

In literature, writers use words to describe characters, settings and feelings. Readers imagine these details in their minds. When a character feels sad, the author explains their emotions through thoughts and descriptions. In cinema, emotions are shown rather than told. A tear falling from a sad protagonist's eyes, a look of admiration between characters or trembling of hands with fear. This makes visual storytelling more immediate and impactful.

Colours play a major role in visual storytelling. Filmmakers carefully choose colour palettes to match emotions. Blue and grey tones often represent sadness and isolation while warm shades like yellow and orange suggest happiness and comfort. Colour grading and lighting also shape the mood. Soft lighting can create warmth while harsh shadows may build tension or fear. Even costumes communicate meaning. A character dressed in dull colours may appear depressed while bright clothes often reflect confidence or innocence. Music and sound effects further strengthen emotional connection. Background scores guide the audience's feelings. Soft melodies create calm while dramatic music builds suspense. Sometimes, silence itself becomes powerful, forcing viewers to focus on visual emotions.

Cinema speaks through the senses. By combining visuals, sound and symbolism, films create stories that touch hearts without relying on words. Cinema proves that you don't always need words to speak.

Sarbani Devaprita
4th Sem., CSE

HEALTH WATCH

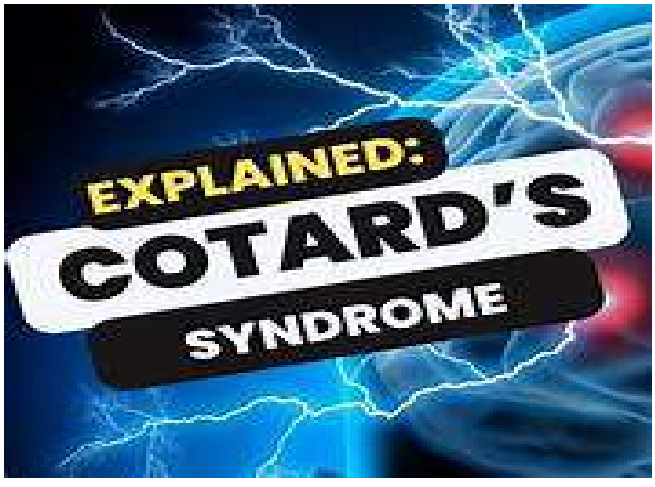
The Living Ghost: Cotard's Syndrome

Cotard's Syndrome, often referred to as "Walking Corpse Syndrome," is a rare and severe neuropsychiatric condition characterized by nihilistic delusions. Individuals affected by this disorder may firmly believe that they are dead, that their internal organs have ceased functioning, or that they no longer exist. In extreme cases, patients may claim that their soul has left their body. Though uncommon, the syndrome represents a profound disturbance in one's perception of self and reality.

The condition was first described in 1880 by French neurologist Jules Cotard. Cotard identified a pattern of "delire de negation" (delusion of negation), in which patients denied the existence of parts of their body or their entire being. Unlike ordinary depressive thoughts, these beliefs are fixed, resistant to logic, and deeply rooted in altered cognition.

Clinically, Cotard's Syndrome is most often associated with severe major depressive disorder, schizophrenia, bipolar disorder, or neurological conditions such as brain injury and epilepsy. Patients may exhibit extreme self-neglect, refusing food, medication, or hygiene because they perceive themselves as deceased. In some paradoxical cases, individuals develop delusions of immortality, believing that since they are already dead, they cannot die again—an idea that may lead to risky or self-harming behaviors.

From a neurological perspective, research suggests that Cotard's Syndrome may involve dysfunction in brain regions responsible for recognition and emotional processing. A commonly discussed theory proposes a



disconnection between the fusiform gyrus, which aids in facial recognition, and the amygdala, which assigns emotional significance. When emotional familiarity is disrupted, the individual may experience profound derealization, leading to the false conclusion that they are no longer alive.

Despite its severity, Cotard's Syndrome is treatable. Management typically includes a combination of antidepressants, antipsychotic medications, and psychotherapy. Electroconvulsive therapy (ECT) has shown particular effectiveness in cases linked to severe depression, often producing rapid improvement when other treatments fail.

Although distressing for both patients and their families, early diagnosis and appropriate intervention can significantly improve outcomes. Cotard's Syndrome ultimately highlights the fragile relationship between brain function, perception, and the fundamental human sense of existence.

Ayesha Pattnayak
2nd Sem, CSE

FOOD FOR THOUGHT

The Critique of Induction and Causality

What is the possibility that the sun will rise tomorrow?

Although it is universally affirmed that the sun rises every day, it is not logically contradictory to argue that it might not rise tomorrow. This philosophical problem was introduced by the Scottish philosopher David Hume (1711–1776) as part of his critique of induction and causality.

Understanding the perspective Hume tried to present through this argument broadens our way of analysing situations. His critique of induction and causality is further discussed and studied in psychology, framing a coherent idea about how the human mind analyses events.

The Theory

Our belief that the sun will rise tomorrow is not based on logical certainty, but rather on habit, custom, and repeated experience. We assume continuity because we have constantly observed it.

Habituation and Associative Learning:

Hume proposed that the human brain links events through constant conjunction—repeatedly seeing one event follow another. When two events consistently occur together, we begin to expect their connection.

Just as a dog learns to associate a bell with food, leading to a conditioned response, humans similarly learn to expect the sunrise after night. Over time, this expectation becomes automatic. Psychologists suggest that the human brain is wired to recognize patterns because it makes thinking more efficient and conserves mental energy.

Cognitive Biases and Heuristics:

- According to Hume, it is not logically incorrect to assume that events occurring repeatedly might not happen in the future.
- Availability Heuristic: We assume that events frequently experienced in the past, like the sun rising, will continue in the future.
- Confirmation Bias: We notice events that support our expectations (sunrises and sunsets) while ignoring possible anomalies.

Social and Political Psychology:

Hume's idea of implicit submission—the tendency to accept established norms without questioning them—is used to analyse political behaviour.

Propaganda and Control: The "sunrise" analogy, symbolizing the routine and unquestioned functioning of society, helps explain how propaganda shapes perceptions by controlling narratives of "reality."

Conclusion:

Hume's sunrise theory explains that humans are primarily driven by habit and association rather than pure logic. Our confidence that the future will resemble the past reflects psychological conditioning more than rational proof.

Satasha Samanwita Pradhan
4th Sem, EE

PROFILE OF AN ORGANISATION

The Indian Space Research Organisation

When we look up at the night sky, we often see stars. But behind many of India's greatest scientific achievements in space stands one remarkable organization — the Indian Space Research Organisation, popularly known as ISRO.

Established in 1969 by Vikram Sarabhai, ISRO was founded with a simple yet powerful vision: to harness space technology for national development. What began as a modest space program operating from a small church building in Thumba, Kerala, has today grown into one of the world's most respected and cost-effective space agencies. The early days were filled with challenges, limited resources, and skepticism, yet the spirit of innovation never faded. Instead, it became the foundation of ISRO's identity.

ISRO's journey is a story of dedication, innovation, and resilience. From launching India's first satellite, Aryabhata, in 1975 to successfully executing the Chandrayaan missions and the historic Mars Orbiter Mission (Mangalyaan), ISRO has repeatedly demonstrated that excellence depends not on a massive budget, but on brilliance, planning, and teamwork. These missions showcased India's technological capabilities to the world and proved that determination can overcome limitations.

One of ISRO's proudest achievements is Chandrayaan-3, which made India the first country to successfully land a rover near the Moon's south pole. This historic milestone strengthened India's global standing in space exploration and ignited curiosity among millions of young minds. It symbolized not just scientific progress, but national pride and collective effort.

Beyond exploration, ISRO plays a vital role in everyday life. Its satellites support weather forecasting, communication networks, disaster management, GPS navigation through NavIC, television broadcasting, agricultural planning, and online education services. During natural calamities such as cyclones and floods, ISRO's satellite data helps authorities respond quickly and effectively, saving countless lives. In many ways, ISRO silently powers the nation's growth from space.

What truly sets ISRO apart is its culture of humility, teamwork, and scientific integrity. The scientists and engineers work tirelessly behind the scenes, driven not by recognition, but by a commitment to national service. For engineering students and aspiring scientists, ISRO represents possibility and purpose. It teaches us that with determination, knowledge, and perseverance, even the sky is not the limit.

As India advances toward becoming a global space power, ISRO remains a beacon of innovation and inspiration — reminding us to dream boldly and reach beyond boundaries.

Tamanna Jaiswal
4th Sem, EE

MENTAL HEALTH:
Ayurveda and Mental health

According to Ayurveda, mental health is an integral part of overall well-being, emphasizing the balance of the body and mind. It offers a holistic, mind-body approach to mental-health, emphasizing balance in daily life through personalized routines, diet, herbal remedies and mindfulness practices to cultivate clarity, resilience and inner peace. In recent years the world has witnessed a significant shift in acknowledging and prioritizing mental-health. In India, a staggering 150 to 200 million people suffer from common and severe mental disorders, making it imperative to prioritize mental health education and awareness. The WHO' s alarming statistics reveal that India holds the unfortunate title of being the world's suicide capital, with over 2.6 lakh cases reported annually.

Mental illness occurs due to any sort of brain damage, stressful life situations, and chronic medical conditions that may lead to various forms of mental health disorders such as OCD, depression, mania, PTSD, and psychosis. Hence, mental illness comes under a vast category in which its unauthenticated behavior affects emotion, thinking ability, and attitude.

Certain herbal medications along with their purificatory treatments address the underlying root cause of the mental disorder and are able to find an effective solution for the cause of mental illnesses such as Stress, Migraines, Dementia, Mood swings, Emotional disturbance, and insomnia. Ayurveda seeks realistic behavior of physical and mental health through holistic light to recognize their actual self for mental nourishment. This systematic technique of mindfulness nourishes the brain cells to achieve positive signals that trigger good thoughts, observations, concerns, feelings, and opinions. The application of medicated herbs with personalized therapies can calm and relax the mind, body, and soul.

Ashwagandha is one such magical herb to improve cortisol levels and thereby increases the proper functioning of brain cells.

Brahmi can accelerate positive impact on memory, concentration, and intelligence and helps to reduce the signs of negative emotions in mental health

Turmeric can improve blood circulation and helps to prevent the brain cells from developing mental disorders.

Virechana is a type of panchakarma therapy in which bitter purgative herbs are introduced to induce vomiting and thereby cleansing of the body takes place to relieve the stress associated with mental disorders.

Shirodhara is the Ayurveda technique of pouring medicated oil onto the center of the forehead and is effective in people who suffer from insomnia, sleep disorders, anxiety, depression, and other forms of mental disorders.

Hence Ayurveda follows a therapeutic regime to remove toxins that inhibit the natural energy flow in the body. Ayurvedic prevention of mental disorders aims at the relaxation of Ojas to pacify the conscious mind for better mental and physical health.

Ms. Rupanwita Mohapatra
Counselling Psychologist

IN CONVERSATION WITH NEW MINDS...

Prof. Subham Kumar Padhy

As part of our feature "In Conversation with New Minds," we bring to you insights from Prof. Subham Kumar Padhy, Assistant Professor in the Department of Computer Science & Engineering at Silicon University. Having joined the institute in 2024, Prof. Padhy represents a new generation of academicians blending cutting-edge research with impactful teaching. He is currently pursuing his Ph.D. from IIIT Bhubaneswar, his research focuses on Explainable Computational Models for Cardiovascular Disease Prediction, along with broader interests in computational cardiology and healthcare informatics.

Interviewer: Sir, could you briefly introduce yourself and your academic journey to our readers?

Prof. Padhy: I am currently serving as an Assistant Professor in the Department of Computer Science and Engineering at Silicon University, Odisha. Throughout my academic journey, I have been driven by a curiosity to apply computing to real-world problems. This interest gradually led me into domains such as artificial intelligence, machine learning, data science, bio-informatics, and healthcare analytics.

My research primarily focuses on developing AI models that are not only intelligent but also explainable and reliable. These models are applied in healthcare settings, particularly for multi model data analysis. What I value most about academia is the opportunity to teach, conduct research, and mentor simultaneously, helping students connect theoretical concepts with practical applications while contributing to meaningful research.

Interviewer: What inspired you to pursue research in computational cardiology and healthcare informatics?

Prof. Padhy: My motivation stems from the desire to apply computer science to problems that have a direct impact on human lives. Cardiovascular diseases remain one of the leading causes of mortality worldwide, and I believe research in this domain has the potential to create significant societal impact.

Computational cardiology is particularly fascinating due to the diversity of data it involves ranging from clinical records and ECGs to cardiac MRIs and other physiological signals. This creates opportunities to design intelligent systems for early and accurate diagnosis.

Interviewer: What advice would you like to give to students aspiring to pursue higher studies?

Prof. Padhy: Pursuing higher studies should be driven by genuine interest in understanding subjects at a deeper level and contributing new knowledge to the field. It is not merely about obtaining another degree; it requires patience, discipline, and independent thinking.

Interviewer: Thank you Sir. It was a pleasure talking to you.

Prof. Padhy: Your are welcome.

Interview taken by **Tamanna Jaiswal**
4th Sem, ECE

STUDENTS' CORNER

I talked to Humanity

Amidst the sky and trees,
it trespasses: humanity,
A little perturbed, questions,
the now fraternity,
What's kindness, virtue or a
forte to the living?

Dare I say, sometimes,
it's not worth believing,
Eyes deceive, throats lie,
tongues twitch and ears itch,
Nevertheless it always remains,
a daunting hitch,
Life used to be simple,
though not really now,
A what always turns back to where,
and whose and how,

The world inveigles faith at times,
strangles every bit of trust,
Sequestered you lie in our hearts,
humanity, and you must,
At least survive, within this soul,
I request her as I rest my back on the bole,
I stare at the sky once again, probing,
She hadn't listened,
the humanity we've been robbing.

Aradhana Dash
8th Sem, CEN

In My Bones

Running wild with dreams too big
for your shoes,
and somehow, everyone clapped along
pure joy, no questions, no doubts,
no disbeliefs or woes.

Your voice was a hymn of belief,
and the world echoed it back.

That tangerine-sweet glow of childhood,
a quiet flare-wild and unaware.
That soft warmth, blanket like, heart tight
of being wrapped in now.

And oh, the ache
not for what's lost,
but for what knew how to stay.

Nostalgia doesn't knock;
it lives in your bones,
keeping you alive
in memories that linger in your soul.

Preetilina Hota
2nd Sem. EIE

SPECIAL FEATURE:

Voices of Impact

Ms. Nilanjana Mukherji & Dr. Sohini Mahapatra

On the occasion of International Women's Day, under the theme "Give to Gain," the SAGE-W Cell of Silicon University, Odisha organized an inspiring interaction with two remarkable women—Ms. Nilanjana Mukherji, a leader in healthcare, and Dr. Sohini Mahapatra, an accomplished legal academic.

With over two decades of experience, Ms. Mukherji's journey from the Taj Group to leading major healthcare institutions reflects her commitment to service excellence. Currently the Managing Director of Padmini Care Hospital, she has held key roles at Apollo Hospitals, Columbia Asia Group, and AMRI Hospitals. Beyond administration, she actively contributes to national healthcare policy as Vice Chairman of the Indian Chamber of Commerce (State Chapter) and Healthcare Vertical Convenor for CII.

Ms. Nilanjana Mukherji

Dr. Sohini Mahapatra

Reflecting on her transition from hospitality to healthcare, she emphasized the importance of empathy. "Patients come with emotional distress, not comfort," she noted, highlighting how healthcare demands not just efficiency but compassion. While technology and AI continue to advance, she stressed that the human touch remains indispensable. She also drew attention to some pressing challenges in India's healthcare system, particularly the shortage of skilled professionals and the need to expand accessible, technology-driven care.

Complementing this perspective, Dr. Sohini Mahapatra brought forth insights from the legal domain. Born and raised in Cuttack, she is an Assistant Professor of Law at National Law University Odisha (NLUO) and a distinguished scholar, holding the distinction of being the first

person in India to earn a Ph.D. in Animal Welfare Law. A gold medalist in her LL.M., she has authored internationally published books on animal law and media law, and actively contributes to policy initiatives such as the social mapping of migrant workers in Odisha.

Her work spans labour law, media law, and animal welfare—fields that, as she explained, intersect in their focus on protecting vulnerable populations. She underscored the critical role of media as the "fourth pillar" of democracy in raising awareness, while also acknowledging the challenges of misinformation in today's digital age. Addressing young women, Dr. Mahapatra emphasized self-determination: the extent of one's growth depends on the goals one sets. Balancing academic responsibilities with research and policy engagement, she demonstrated that persistence and clarity of purpose are key to success.

Both speakers highlighted the role of educational institutions as catalysts for change. By encouraging dialogue, critical thinking, and inclusivity, universities nurture future leaders capable of driving meaningful transformation. The event was followed by a panel discussion centering mostly on Women in STEM. The panelists included Dr. Mohapatra, Ms. Mukherji and Prof. Ipsita Pahi from the department of EEE which was moderated by Ms. Anoushka Parija, who holds a Masters degree in Political Science from Miranda House, Delhi University.

A panel discussion on Women in STEM

Compiled by **Swati Mishra**
4th Sem, CSE

SPECIAL FEATURE:

Woman Achiever of the Year 2026
Vaishnavi Singh

In a world where excellence often demands choosing one path over another, Vaishnavi Singh, a fourth-year Computer Science and Engineering student at Silicon University, stands as a remarkable exception. Honoured as the Women Achiever of the Year 2026, she has carved a niche for herself by seamlessly balancing academics, sports, and co-curricular pursuits, while serving as the representative of the Achievers' Club.

For Vaishnavi, success has never been about compromise—it has been about balance. Excelling both in academics and sports, she attributes her consistency to discipline and structured planning. "Sports keep me mentally refreshed and improves my focus," she shares, emphasizing how physical activity enhances her academic performance. By setting clear goals and breaking them into manageable tasks, she has built a routine rooted in consistency, even on days when motivation runs low.

Her journey as the representative of the Achievers' Club has further shaped her into a confident leader. The role demanded more than just coordination—it required accountability, teamwork, and the ability to represent diverse voices. Stepping beyond her comfort zone, Vaishnavi learned the importance of listening and fostering collaboration. Her vision is to leave behind a culture where every member feels encouraged, valued, and inspired to grow.

Reflecting on her four-year journey, Vaishnavi identifies managing multiple responsibilities as her greatest challenge. Balancing academics, extracurriculars, and personal commitments was often overwhelming, but it became a defining phase of growth. It taught her resilience, time management, and the ability to remain composed under pressure. These experiences, she believes, have shaped her into someone who approaches challenges with clarity and a problem-solving mindset.

Being recognized as the Woman Achiever of the Year holds deep significance for her. Beyond personal accomplishment, she views it as a reflection of consistent effort and the support of those who believed in her journey. Her message to aspiring students is simple yet powerful: believe in yourself, stay consistent, and step beyond your comfort zone. "Growth comes from challenges," she emphasizes, encouraging others to embrace them with confidence.

Vaishnavi Singh's journey is not just a story of achievement, but one of determination, balance, and quiet perseverance. She embodies the spirit of a true achiever—one who not only excels but also inspires others to strive for their best.

Compiled by **Esha Agarwal**
6th Sem, CST

MY CYBERSPACE

Vehicle-to-Vehicle (V2V) Safety Technology: A New Road Safety Paradigm for India

India continues to face a severe road safety crisis, reporting nearly 4.8 lakh road accidents and over 1.72 lakh fatalities annually. Young and working-age adults form a disproportionately high share of victims, highlighting the urgent need for technology-driven interventions. In this context, Vehicle-to-Vehicle (V2V) safety technology has emerged as a promising solution to reduce collisions and improve traffic efficiency.

V2V communication is a wireless system that enables vehicles to exchange real-time data such as speed, location, direction, and braking status directly with nearby vehicles, without relying on mobile networks or driver line of sight. Each vehicle is equipped with an on-board communication unit (OBU) that broadcasts and receives safety messages multiple times per second using a dedicated radio frequency band. If a vehicle suddenly brakes, changes direction, or appears in a blind spot, nearby vehicles receive instant warnings, allowing drivers or automated safety systems to react in time.

The significance of V2V lies in its ability to extend driver awareness beyond visual limitations, reduce crashes caused by delayed human reactions, and support safer driving in adverse conditions such as fog, rain, or night-time travel. Continuous data sharing also enables smoother traffic flow by reducing abrupt braking and congestion, particularly in densely populated urban corridors.

Recognising its potential, the Government of India plans to roll out V2V communication

nationwide by the end of 2026, initially mandating OBUs in new vehicles. However, challenges remain. Effective implementation requires mass adoption, standardisation across manufacturers, affordable deployment costs, and robust cybersecurity and data privacy frameworks to prevent misuse or hacking.

Globally, countries such as Japan, China, the United States, and parts of Europe have already begun integrating V2V and broader V2X systems into their intelligent transport ecosystems. With strong regulatory support, secure design, and gradual penetration, V2V technology can become a critical pillar of India's future intelligent transport system, significantly reducing road fatalities while complementing better infrastructure, enforcement, and responsible driving behaviour.

Dr. Sushree Samita Rout
Associate Professor, CSE Dept.

ALUMNI SPEAK

In an era defined by rapid technological evolution, the mining and energy sectors are undergoing a profound transformation. At the forefront of this shift is Mr. S. Srinivasa Rao, Chief Digital and Information Officer at Vedanta Aluminium & Power Limited and an alumnus of Silicon Institute of Technology, EEE branch 2001-2005 batch whose journey reflects the power of innovation, adaptability, and continuous learning.

With nearly two decades of experience across mining, metals, and energy, Mr. Rao has led large-scale digital initiatives integrating advanced technologies such as AI, IoT, and predictive analytics. However, he underscores that no single technology can revolutionize the industry in isolation. "Transformation comes from a combination of technologies working together," he observes, emphasizing the importance of aligning innovation with tangible operational value rather than adopting technology for its own sake.

A strong advocate of collaboration, Mr. Rao highlights the growing synergy between start-ups and established organizations. Through initiatives such as Vedanta Spark, start-ups contribute speed, creativity, and a solution-oriented mind-set, while corporations provide scale and real-world platforms for implementation. This collaborative approach, he notes, fosters innovation through experimentation, where early setbacks serve as valuable learning opportunities.

Sustainability remains a critical priority for the sector. According to Mr. Rao, the foundation lies in measurement and optimization. By leveraging data-driven insights, industries can effectively reduce wastage, enhance efficiency, and make informed decisions that balance productivity with environmental responsibility.

Despite these advancements, digital transformation presents its own set of challenges. Among the most significant is change management, as resistance often arises from concerns regarding job displacement. Mr. Rao emphasizes that addressing this requires a leadership-driven, top-down approach, complemented by continuous up skilling initiatives. "Digital versions are there to improve operations, not replace them," he affirms, underscoring the need for alignment between technology and the workforce.

For young engineers entering an increasingly AI-driven landscape, Mr. Rao offers clear and practical guidance: cultivate strong technical, analytical, and problem-solving skills. While technologies will continue to evolve, these core competencies remain indispensable.

Reflecting on his own journey from campus to corporate leadership, Mr. Rao encourages students to approach learning with curiosity and composure. "Enjoy your time and stay eager to learn," he advises, reminding young minds that growth is a continuous process shaped by both knowledge and experience.

His journey stands as a testament to the fact that innovation, when guided by purpose and collaboration, has the potential to drive meaningful change—not only across industries but also in shaping the future itself.

Compiled by **M. Zuhayer Labeeb**
4th Sem, ECE

THE INDIAN START-UP SCENE

Coratia Technologies:
India's Deep-Tech Pioneer Diving into the Future

The ocean has always been a paradox—vast, powerful, and largely unseen. It is dark, deep, and unpredictable—and for decades, it has remained one of humanity's least accessible frontiers. In the bustling world of deep-tech innovation, one Odisha-based startup is charting a new course beneath the waves. Coratia Technologies Pvt. Ltd., founded in 2021 by engineers Debendra Pradhan and Biswajit Swain, it is transforming how India approaches underwater robotics from industrial inspections to national defence.

Coratia's work centers on Remotely Operated Vehicles (ROVs) and Autonomous Underwater Vehicles (AUVs). These robots act as eyes and hands beneath the water, conducting ship hull inspections, underwater infrastructure assessments, seabed mapping, environmental surveys, and surveillance operations. Equipped with high-definition cameras, sonar systems, precision thrusters, and intelligent sensor arrays, the robots deliver real-time data while significantly reducing operational risk and cost.

Platforms like Jalasimha, Jaladuta, and Navya reflect years of focused engineering each designed to perform reliably in dark, high-pressure underwater conditions. What truly set Coratia apart, however, was trust.

That trust came in the form of a landmark ₹66-crore contract from the Indian Navy, marking one of the first large-scale inductions of Indian-built underwater robotic systems into defence operations. It was a moment that validated not just Coratia's technology, but India's growing

capability in deep-tech innovation.

With strong backing from investors such as Piper Serica Angel Fund, Pontaq Ventures, and MGF Kavachh, Coratia has since focused on scaling research, strengthening manufacturing capabilities, and preparing for global markets. Its vision extends beyond borders toward becoming a trusted international supplier of underwater robotic solutions across defence, energy, and infrastructure sectors.

Today, Coratia Technologies stands at the intersection of engineering excellence and national ambition. From a university campus to the depths of the ocean, its journey reflects a new generation of Indian startups. Coratia's story is proof that when engineering meets purpose, even the deepest frontiers become reachable.

Rashika Das
6th Sem, EEE

TRAVEL DIARY

Finding Stillness in Jirang...

There are some places that don't really announce themselves loudly—they wait for you to arrive quietly. One such place lies in the hills of Odisha—Jirang. Known for being the home to eastern India's largest Buddhist monastery, Jirang isn't just a destination but an experience of eternal calmness unfolding slowly.

The road to Jirang gradually shed the chaos of everyday life. Lush greenery lined the highways, villagers passed by in unhurried rhythms, and the air seemed lighter and fresher with every turn I took. When the Golden pagoda finally came into my view, it didn't demand any attention—it simply stood there, all composed, reflecting the spirit of the surrounding, making everyone aware of its presence.

Calmness prevailed inside the monastery. Monks making their daily prayers, tourists moving in silence so as to not disturb the monks, the prayer flags dancing quietly in the wind. Distant chants were blending seamlessly with the sound of Prayer Wheels (*Mani* wheel/drum). I found myself getting lost slowly into this environment, walking slowly, speaking softer, and becoming more observant about my surroundings. The architecture, symmetrical, and minimal, carried some meaning behind it which unfolds in front of everyone's eyes, depicting a sense of balance in life.

What struck me most was how effortlessly Jirang encouraged presence. There was no rush which we usually see around us. Instead, moments unfolded naturally—the warmth of sunlight on stone paths, the echo of the footsteps of the children studying there, their laughs and giggles in the open halls. The simplicity of just living, the meaning of life, the lifestyle are their teachings and are in all aspects—beautiful.

Away from the monastery, the hills make Jirang feel even calmer, almost protective. Life here was rooted in simplicity rather than urgency. It made me reflect on how often we mistake noise as importance and speed as progress. Leaving Jirang felt like waking up from a calm and peaceful dream. I carried back no souvenirs, but something more meaningful—a reminder that stillness has a language of its own, and sometimes listening is the best way we can move ahead in life.

M. Zuhayer Labeeb
4th Sem, ECE

MOVIE REVIEW
SRIKANTH (2024)

Srikanth (2024) is a heartfelt and inspiring biographical drama that traces the journey of Srikanth Bolla, portrayed with remarkable sincerity by Rajkummar Rao. The film stands out for its simple yet powerful storytelling, allowing the audience to connect deeply with its themes of resilience, determination, and self-belief.

One of the most impactful moments comes early in the film, when young Srikanth is denied the opportunity to study science. The scene is both frustrating and emotional, highlighting how societal limitations are often imposed based on assumptions rather than ability. Rather than discouraging him, this moment becomes a turning point, fuelling his determination to challenge these barriers and prove his potential.

Another significant phase is his transition to studying abroad, where he learns to navigate independence and adapt to a completely new environment. These scenes capture not only his academic journey but also his personal growth, as he builds confidence and learns to overcome unfamiliar challenges. They reflect the courage it takes to step out of one's comfort zone and embrace new opportunities.

The film truly shines in the segments where Srikanth builds his company from scratch. These moments feel raw and authentic, portraying rejection, doubt, and repeated setbacks without glorifying success. Instead, they emphasize that achievement is a gradual process, built through persistence, patience, and unwavering belief in oneself.

Equally moving are his interactions with his

teacher, played by Jyotika, whose constant support plays a vital role in his journey. Her belief in him highlights how even one person's encouragement can create a lasting impact and help shape a brighter future.

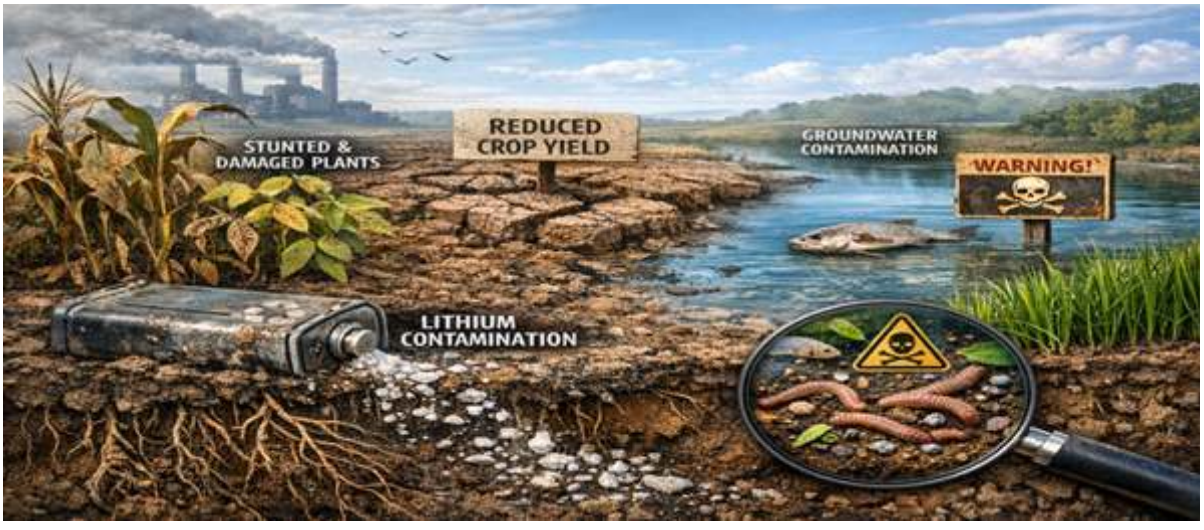
What makes Srikanth memorable is its underlying message—that while the world may impose limitations, they are not absolute. The film encourages viewers to question biases, be more empathetic, and support others in meaningful ways. It reminds us that true strength lies in resilience and the courage to keep moving forward despite obstacles.

By the end, Srikanth leaves a lasting impression, offering both hope and inspiration. It reassures us that even when doors seem to close, determination has the power to open new paths and redefine possibilities.

Ananya Das
4th Sem., CSE

EARTH MATTERS

From Clean Cars to Toxic Waste: The EV Dilemma



Electric vehicles (EVs) are widely celebrated as a cleaner alternative to traditional petrol and diesel cars, promising reduced air pollution and a significant cut in greenhouse gas emissions. However, beneath this green image lies a growing environmental concern—battery waste. EVs rely on lithium-ion batteries that have a limited lifespan, typically lasting between eight to fifteen years. Once these batteries reach the end of their life, they become a form of electronic waste that is difficult to manage. These batteries contain toxic and flammable materials such as lithium, cobalt, and nickel, which can pose serious risks to soil, water, and human health if not disposed of properly. As the demand for EVs continues to rise globally, the volume of used batteries is expected to increase dramatically, creating a new waste crisis. Recycling these batteries is not a simple solution, as the process is expensive, energy-intensive, and still not widely available in many parts of the world. In addition, improper recycling or informal disposal practices can lead to environmental contamination and health hazards. Soil contamination can particularly result in decreased soil fertility, which can ultimately impact both plants and the microbiome. While EVs play an important role in reducing carbon emissions, their long-term sustainability depends on how effectively we address the issue of battery disposal. Governments, industries, and researchers must work together to develop efficient recycling technologies, promote the reuse of batteries for secondary purposes, and establish strict regulations for safe disposal. Without these measures, the shift from fuel-powered vehicles to electric ones may solve one environmental problem while creating another, turning clean cars into a source of toxic waste and challenging the true meaning of sustainability.

Excerpted from the research studies published in journals such as Environmental Pollution (2023) and Plant Physiology and Biochemistry (2016), along with scientific database sources like PubMed.

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GUIDING ASPIRATIONS:
Admissions at Silicon

While pursuing the dream of securing a job, we often overlook that we are not just choosing a way to earn a living but deciding how we will spend a significant part of our lives. The familiar saying, 'Do what you love, love what you do', still holds true, but in the 21st century passion alone is not enough; skills matter just as much. This is where counselling becomes crucial. The admissions team at Silicon guides students in making informed choices where their passion and skills align to shape a meaningful career.

At Silicon, students are admitted through the Joint Entrance Examination (Main) as well as the Silicon University Admission Test (SUAT). To streamline the process, the admissions team provides a dedicated portal that explains eligibility, applications, and other key details. During counselling, they introduce students to emerging fields such as VLSI and Molecular Medicine. The team also addresses common concerns of students and parents regarding placements, academics, and campus life, while assisting with registration and admission formalities. They further help families understand practical aspects such as hostel facilities, transport, and other support systems that ensure a comfortable and enriching campus experience. All of this in accordance with SUSP, the Silicon University Strategic Plan.

In the current scenario, Dr. Bikram Mishra, Faculty-in-Charge of the admissions team, believes there is a need to increase awareness among students not only about different programs and their scope, but also about eligibility criteria and selection processes. He also emphasizes that the counselling process of the Odisha Joint Entrance Examination (OJEE) should be made clearer, as meritorious students sometimes miss out on good colleges due to confusion around options such as slide-up and other procedural aspects. Recalling an incident that highlights the importance of informed guidance, he mentions a student with an excellent academic record in Botany Honours having initial plans to pursue an MCA program. After a detailed discussion about her interests and career prospects, she chose M.Sc. (Molecular Medicine) instead and later secured a good placement.

Drawing upon such experiences, the admissions team measures its success in a simple way- in the journeys their students eventually build. For them, success is not counted in applications processed, but in the moments when students discover their path and begin to thrive. When the same students return to bid farewell, the quiet confidence in their glimmering eyes makes every hour of counselling worthwhile.

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