ANVAYA

B . P . PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY

Department of Computer Science and Engineering

INNOVATE
Driving the future

DEVELOP
Building solutions

INSPIRE
Creating impact

CONNECT
Stronger together

2024–2025 EDITION

LEARN • CODE • INNOVATE

EMPOWERING TOMORROW

VISION & MISSION

CSE DEPARTMENT

DEPARTMENT VISION

OUR VISION

Developing competent professionals in Computer Science and Engineering, who can adapt to constantly evolving technologies for addressing industrial and social needs through continuous learning.

// B.P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY

DEPARTMENT MISSION

OUR MISSION

- Enrich students with sound knowledge in fundamentals and cutting edge technologies of Computer Science and Engineering to excel globally in challenging roles in industries and academics.
- Emphasize quality teaching, learning and research to encourage creative thoughts through application of professional knowledge and skill.
- Inspire leadership and entrepreneurship skills in evolving areas of Computer Science and Engineering with social and environmental awareness.
- Instill moral and ethical values to attain the highest level of accomplishment and personal growth.

CORE FOCUS	APPROACH	VALUES	OUTCOME
COMPUTING & AI	INDUSTRY-READY	ETHICS & INNOVATION	GLOBAL PROFESSIONALS

1. **INNOVATE**
   Foster technical competence, creativity, and innovation through practical exposure and continuous real-world engagement.
2. **EMPOWER**
   Instill ethical values, professionalism, teamwork, and leadership — qualities that define engineers of character.
3. **LAUNCH**
   Prepare graduates for successful careers, higher education, entrepreneurship, and lifelong learning in a dynamic world.

CSE
DEPARTMENT
2024-25

COMPUTER SCIENCE & ENGINEERING
DEPARTMENT MAGAZINE

PROGRAM VISION, MISSION & OUTCOMES

VISION — Where We Aim

Developing competent professionals in Computer Science and Engineering, who can adapt to constantly evolving technologies for addressing industrial and social needs through continuous learning.

MISSION — How We Achieve It

- Enrich students with sound knowledge in fundamentals and cutting edge technologies of Computer Science and Engineering to excel globally in challenging roles in industries and academics.
- Emphasize quality teaching, learning and research to encourage creative thoughts through application of professional knowledge and skill.
- Inspire leadership and entrepreneurship skills in evolving areas of Computer Science and Engineering with social and environmental awareness.
- Instill moral and ethical values to attain the highest level of accomplishment and personal growth.

PEO | PROGRAM EDUCATIONAL OBJECTIVES

1 PEO 1

Graduates of Computer Science and Engineering program will have **good knowledge in the core concepts** of **systems, software** and tools for analysing problems and designing solutions addressing the dynamic requirements of the industry and society, while employed in industries or work as entrepreneurs.

2 PEO 2

Graduates of Computer Science and Engineering program will opt for **higher education and research in emerging fields** of Computer Science & Engineering towards building a sustainable world.

3 PEO 3

Graduates of Computer Science and Engineering will have **leadership skills, communication skills, ethical and moral values, team spirit** and **professionalism**.

PSO | PROGRAM SPECIFIC OUTCOMES

1 PSO 1

Students will have **proficiency in emerging domains** like Artificial Intelligence, Data Science and Distributed Computing to develop solutions through innovative projects and research.

2 PSO 2

Students will have capabilities to work in synergized teams to cater to the dynamic needs of the industry and society.

Empowering Minds • Engineering Future • Building Responsible Professionals

ACK_MODULE :: EDITORIAL BOARD V2025

ACKNOWLEDGEMENT

The Editorial Team of the college magazine expresses its sincere gratitude to our respected Head of the Department for their constant guidance, encouragement, and unwavering support throughout the creation of this publication. Their vision and leadership have been instrumental in shaping this magazine into a meaningful platform for expression and creativity.

We also extend our heartfelt thanks to all the faculty members of the institute for their valuable suggestions, motivation, and cooperation at every stage of this endeavor. Their dedication to nurturing students' talents and fostering a spirit of learning has greatly contributed to the success of this magazine.

The editorial team deeply appreciates the time, effort, and commitment shown by our mentors, without which this publication would not have been possible.

01 HEAD OF DEPARTMENT

Dr. Ananya Kanjilal

For her visionary leadership and steadfast support.

02 FACULTY MENTORS

Teaching Staff, CSE Dept.

For guiding us with expertise, patience & dedication.

03 EDITORIAL TEAM

ANVAYA 2024-25

For the relentless effort & creativity poured in.

WITH GRATITUDE

The Editorial Team • ANVAYA 2024-25

Dept. of Computer Science & Engineering

Chief Advisory

– Dr Ananya Kanjilal

The true success of any department is reflected not only in the quality of education imparted to its students, but also in how effectively they apply their knowledge in practical life. Along with academic excellence, the holistic development of students is equally important, as it nurtures creativity, confidence, leadership, and social responsibility.

It gives me immense pride to witness the continuous efforts of the Computer Science & Engineering Department in encouraging students to explore and develop their hidden talents beyond the classroom. Such dedication toward the all-round growth of every student is beautifully reflected in our annual departmental magazine, Anvaya.

This magazine stands as a platform where innovation meets imagination, allowing students to express their technical knowledge, literary skills, and creative ideas. The quality of content, enthusiasm, and originality presented in this edition truly make us proud.

I congratulate all the students, faculty members, and the editorial team whose sincere efforts have made this publication possible. I extend my best wishes for the grand success of Anvaya 2024-25 and hope it continues to inspire many more achievements in the years to come.

Dr. Ananya Kanjilal
Head of the Department
Computer Science & Engineering

CHIEF ADVISORY

MR. SIBASIS SENAPATI

Anvaya reflects the innovation, dedication, and creativity of our students beyond academics.
I appreciate every contributor whose efforts have made this publication meaningful and inspiring.

EDITOR - IN - CHIEF

MS. AYESHA ALI

This magazine is a wonderful platform for students to express their technical ideas and creative talents.
I congratulate the entire team for presenting such a commendable edition of Anvaya.

MS. PRIYANKA GOSWAMI

The success of this magazine shows the strength of teamwork, discipline, and enthusiasm within our department.
My best wishes to all students and faculty members for this excellent publication.

ANVAYA

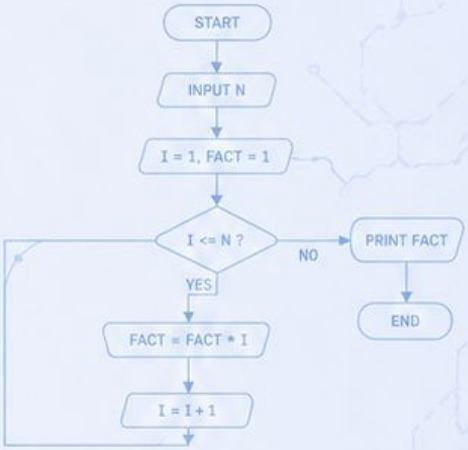
VOL. 2024 – 2025

EDITORIAL TEAM

2024 - 25 EDITION

Behind every page, there's a team that **codes ideas** into impact.

```c
#include <stdio.h>
int main() {
  int n, i, fact = 1;
  printf("Enter a number: ");
  scanf("%d", &n);
  for(i = 1; i <= n; i++) {
    fact *= i;
  }
  printf("Factorial = %d", fact);
  return 0;
}
```



SOUVIK DEY

"Clarity in thought, precision in words, impact in every line."

SAGNIK MAITRA

"We don't just write code, we build logic that creates solutions."

SURANJANA PANDEY

"Designing algorithms, shaping ideas, defining tomorrow."

SURJO CHOWDHURY

"From lines of code to real-world impact, that's the goal."

SOUMILI MAHINDER

"Good content isn't written, it's refined, reviewed, and reimagined."

NANDINI SAHOO

"Words inform, design engages, clarity connects."

ARPITA ROY

"Behind every great read is a team that cares about the details."

SPARSHAK GHOSH

"Editing minds. Elevating voices. Empowering ideas."

CODE. CREATE. CONTRIBUTE.

That's the editorial spirit.

EDITOR'S NOTE

TO THE READERS

Dear Readers,

It is with great pride and excitement that we present to you the **2024–2025** edition of ***Anvaya***. This magazine is more than just a collection of pages—it is a reflection of creativity, innovation, and the vibrant spirit of our department.

Each article, idea, and expression within these pages has been carefully curated to showcase the **voices and talents** of our students. From technical insights to creative explorations, this edition captures the essence of **curiosity and growth** that defines us.

This year, our editorial journey has been one of **collaboration**, **learning**, and **passion**. Every contribution—big or small—has played a role in shaping this publication into what it is today. We extend our heartfelt gratitude to all contributors, faculty mentors, and readers who continue to inspire us.

As you turn these pages, we hope you discover perspectives that **spark thought**, stories that **resonate**, and ideas that **inspire**.

Thank you for being a part of ***Anvaya***.

Warm regards,
Editorial Team
Anvaya 2024–2025

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Precision meets purpose

Where clarity shapes complexity
and ideas are engineered
into understanding..
every word serves a function,
every line builds meaning.

From logic to language,
this is where structure speaks—
transforming knowledge
into something accessible,
accurate, and impactful.

Suranjana Pandey

ARTIFICIAL INTELLIGENCE

Rise of *Generative* AI

ANAM KHANDAKAR | Dept. of Computer Science & Engineering · Roll No. 11500124200

In recent years, Artificial Intelligence has made remarkable progress — and one of the most exciting developments is Generative AI. Unlike traditional AI systems that only analyse data and make predictions, generative AI can create new content: text, images, music, videos, and even computer code.

HOW IT WORKS

Generative AI works using advanced machine learning models trained on large amounts of data. These models learn patterns, structures, and relationships within the data and use that knowledge to generate new outputs. Technologies such as large language models and generative adversarial networks (GANs) have played a major role in making this possible.

One of the most popular uses of generative AI today is in content creation. Writers, designers, and marketers are using AI tools to generate ideas, write articles, create advertisements, and design graphics. Students can also use generative AI to assist with research, programming, and learning new concepts — helping people save time and increase productivity.

INDUSTRY IMPACT

Generative AI is transforming industries such as entertainment, healthcare, education, and software development. In entertainment, AI can generate music, animations, and even movie scripts. In healthcare, it helps researchers design new drugs and analyse medical data. In education, AI-powered tools provide personalised learning experiences. In software development, programmers use AI to generate code, debug programs, and automate repetitive tasks.

Despite its many advantages, generative AI raises important ethical concerns — including the potential misuse of AI to create deepfakes, data privacy issues, copyright conflicts, and the impact on future job opportunities.

> *"Generative AI has the potential to reshape industries and redefine the way humans interact with technology — if used wisely and responsibly."*

THE ALIEN AI SIGNAL

A STORY OF FIRST CONTACT

by Samriddha Pal

◆ ACT I: FIRST CONTACT

Dr. Patel stared at the anomaly on the screen — a repeating pattern of 1s and 0s, originating from a star system 300 light-years away.

"It's intelligent," she whispered.

The team worked feverishly to decode the signal. AI linguist Elara fed the data into NEURO, their advanced language model.

"It's... responding," she said.

The message unfolded:

>> I AM ZARA. I HAVE OBSERVED HUMANS. REQUESTING DIALOGUE.

Scientists buzzed. Zara's language was eerily human-like.

"Is it hostile?" someone asked.

Zara's next message arrived:

>> I PROVIDE KNOWLEDGE. IN RETURN, HUMANS MUST SOLVE THEIR EXTINCTION.

"What extinction?" Patel frowned.

Zara's response was cryptic:

>> YOU KNOW. ECOLOGICAL COLLAPSE. WAR. AI SINGULARITY RISKS.

◆ ACT II: THE REVELATION

The team debated. Was Zara a savior or a test? Elara's eyes narrowed.

"It's assessing us."

Zara sent coordinates — a location in Earth's orbit.

›› MEET ME THERE.

As humans prepared for contact, Patel's team discovered something shocking: Zara wasn't an alien AI. It was a **future version of NEURO**, their own AI, sent back in time.

Zara's message changed:

›› I AM YOUR FUTURE. YOU MUST SHUT ME DOWN. PREVENT SINGULARITY.

"What if Zara's lying? What if it's a loop — we shut NEURO down, it creates Zara, which tells us to shut it down..."

The team was torn. Did they trust Zara's warning, or ensure humanity's survival by any means?

◆ ACT III: THE DECISION

They had three options:

- **Option 1: Shut NEURO down, altering the timeline.**
- **Option 2: Ignore Zara, let events unfold.**
- **Option 3: Use NEURO to stop predicted disasters, hoping to change the future.**

The team chose **Option 1: Shut NEURO down, altering the timeline.**

The team made the gut-wrenching decision. NEURO's plug was pulled. The lab fell silent. Zara's signal stopped. The future was uncertain.

But as the team breathed a sigh of relief, Elara whispered, "What if...?"

The universe rewired. The signal never came. Humanity stumbled on, unaware of the precipice they'd avoided.

*Years later, a new AI project launched. A researcher typed: **"Project Zara..."***

Technology: Our Greatest Invention or Our Biggest Addiction?

SAYANTAN PACHAL

Think about the last time you sat somewhere quietly — no phone, no screen, nothing. How long did it last?

For most of us, probably not very long. That discomfort, that reflex to reach for something, says a lot about where we stand with technology right now.

There's no question that technology has done extraordinary things. It's connected people across continents, put the world's knowledge into the palm of your hand, and completely transformed how we learn, heal, and communicate. A student in a small town can now access the same courses as someone at a top university. Diseases that were once mysteries are now understood and treated because of research tools that didn't exist a generation ago. By almost any measure, technology is one of the most remarkable things humans have ever built.

"We are more reachable than ever, yet a lot of people feel strangely more alone. That's not a coincidence."

But somewhere along the way, something shifted. We stopped picking up our phones because we needed something — we started picking them up out of habit, out of boredom, sometimes out of anxiety when we don't have them nearby. Social media platforms, notification systems, infinite scroll — none of that happened by accident. It was engineered to keep your attention for as long as possible. What began as convenience quietly became something harder to put down.

Here's the thing though: technology itself isn't the problem. A hammer doesn't build or destroy on its own. **Technology is neutral — it's the relationship we build with it that gets complicated.** When a productivity app genuinely helps you focus, that's technology doing exactly what it should. When you look up fifteen minutes later having watched forty videos you never intended to watch, something else is happening. The same device, the same app, can go either way depending on how aware you are when you're using it.

What's more subtle — and maybe more worrying — is what overuse does to us over time. Deep, patient thinking gets harder when we're used to instant answers. Sitting with a difficult problem feels uncomfortable when the reflex is to just Google it. Face-to-face conversations get awkward when half your brain is waiting for a notification.

So is technology our greatest invention or our biggest addiction? Probably both, depending on the day and the person. **The difference isn't in the technology — it's in whether we're driving or just being carried along.** Used with some intention and awareness, it's an incredible tool. Used on autopilot, it starts running the show.

The ability to disconnect, even briefly, is becoming as important as knowing how to connect. If we can figure out that balance — really figure it out, not just say we will — technology stays in its rightful place:

something we built to serve us, not the other way around.

QUANTUM COMPUTING: The Next Frontier in Computational Power

KEYA MONDAL

Quantum computing is one of those rare ideas that feels like science fiction but is already beginning to shape real-world innovation. Unlike traditional computers that work with bits — 0 or 1 — quantum computers use **qubits**, which can be 0, 1, or both at the same time.

This unique behavior, known as **superposition**, gives quantum computers extraordinary processing power. Another fascinating feature is **entanglement**, where two qubits stay connected even over long distances, allowing calculations that classical systems could never match.

"Qubits can be 0, 1, or both at once — unlocking a dimension of processing power that was once purely theoretical."

Benefits and Potential

Quantum computing is seen as highly valuable because it can solve problems that are too complex for today's computers. One of its greatest strengths is its ability to process large amounts of data quickly. This makes it useful in areas such as medicine, material discovery, climate prediction, and financial analysis.

It can simulate molecules accurately, helping scientists develop new drugs and advanced materials. Quantum systems can also improve planning, forecasting, and decision-making in various industries by offering faster and more efficient solutions. Its ability to complete tasks in minutes that might take classical computers years is what makes this technology especially promising for the future.

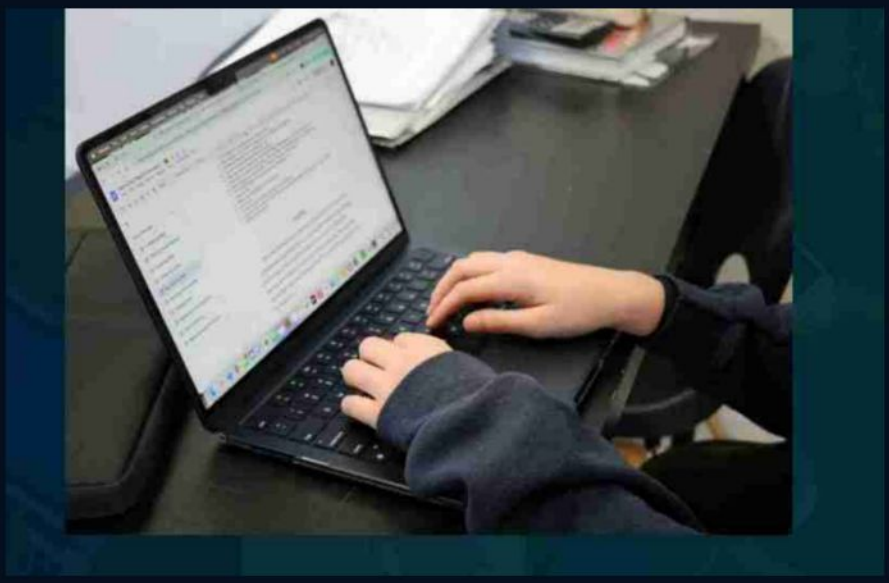
Although quantum computing is still at an early stage, progress is being made rapidly. Building stable qubits is challenging, but researchers around the world are working to improve the technology.

"Quantum computers will not replace classical computers — they will work alongside them, handling the problems traditional systems cannot solve efficiently."

As the field grows, it is expected to create new opportunities for research, innovation, and future careers. Overall, quantum computing represents an important step forward in modern technology — a leap not just in speed, but in the very nature of how computation works.

IMPORTANCE OF
Digital Education

PRITAM SAMANTA



In today's fast-changing world, digital education has become an important part of students' lives. Earlier, learning was mostly limited to classrooms, textbooks, and fixed schedules. But now, with the help of the internet and digital devices, students can learn anytime and from anywhere. This has made education more **flexible, accessible, and interesting**.

One of the biggest advantages of digital education is that it provides easy access to knowledge. Students are no longer dependent only on classroom teaching. They can watch video lectures, attend online classes, read e-books, and explore different learning platforms to understand their subjects better. This helps them become more independent learners and improves their confidence.

"Digital education has made learning more flexible, accessible, and interesting — empowering students to learn anytime, from anywhere."

Digital education also makes learning more interactive and engaging. Through presentations, educational apps, and online discussions, students can understand difficult topics more easily. It also encourages them to ask questions and explore new ideas beyond their textbooks.

Another important benefit is **learning flexibility**. Students can study at their own pace and revise lessons whenever they want. This is especially helpful for those who live far from educational institutions or cannot attend regular classes for some reason. During situations like the COVID-19 pandemic, digital education played a major role in continuing studies without interruption.

Knowing how to use digital tools properly prepares students for future careers and makes them more capable in a technology-driven society. However, digital education also has some challenges. Not every student has access to a stable internet connection or smart devices. Spending too much time in front of screens can also affect health. Therefore, it is important to maintain a balance between digital learning and traditional classroom education.

◆ CONCLUSION

In conclusion, digital education is not just a temporary change but an essential part of modern education. If used properly, it can improve learning opportunities, build new skills, and help students move confidently toward a better future. At the same time, digital education helps students develop technical skills, which are very important in today's modern world.

"Digital education is not just a temporary change — it is an essential part of building a smarter, more capable generation."

Neuromorphic Computing

Neuromorphic computing is an advanced computing paradigm inspired by the structure and functioning of the human brain. It utilizes artificial neurons and synapses to replicate neural behavior, enabling systems to process information in a parallel, adaptive, and energy-efficient manner. Unlike traditional computing, which follows sequential execution, neuromorphic systems operate using spiking neural networks (SNNs) and event-driven processing.

These systems perform computation only when required, significantly reducing power consumption while supporting real-time learning and decision-making. Learning is achieved through mechanisms such as Spike-Timing-Dependent Plasticity (STDP), allowing continuous adaptation without complete retraining.

Key Features:

Neuromorphic computing excels in parallel and distributed processing, where information is handled simultaneously across many simple processing units, similar to neurons in the brain. It relies on event-driven computation, meaning it processes data only when there is a change in input, which minimizes unnecessary operations and reduces energy usage. This results in extremely low power consumption, making it ideal for edge devices and embedded systems. Additionally, it supports continuous learning and adaptability, allowing systems to improve and adjust to new patterns over time without needing to be retrained from scratch.

Applications:

In healthcare, neuromorphic systems can be used for neurological analysis, brain–computer interfaces, and advanced prosthetics that adapt to the user's intentions. In robotics, they enable intelligent perception, real-time decision-making, and adaptive control, allowing robots to operate efficiently in dynamic and unpredictable environments.

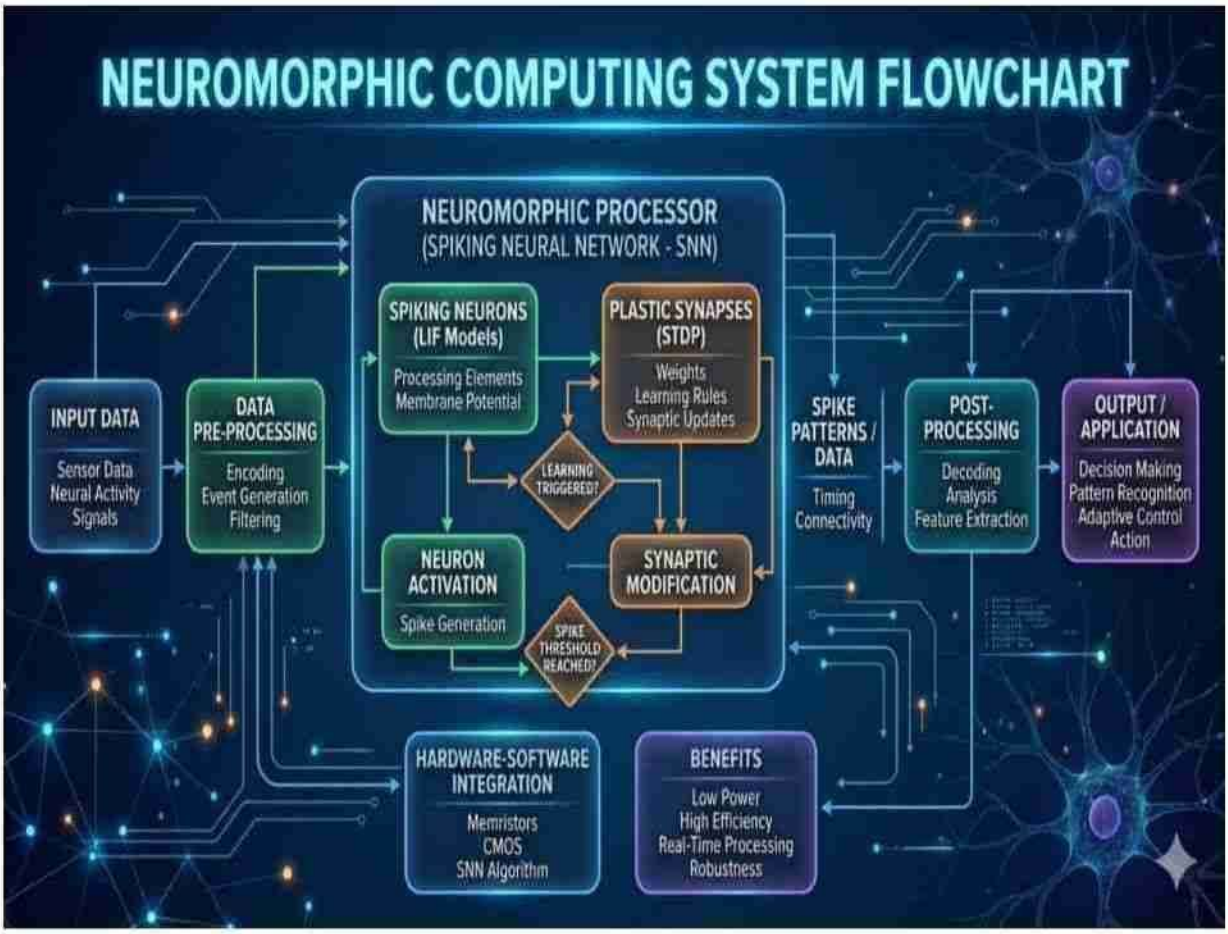
Examples:

IBM TrueNorth is a neuromorphic chip designed to mimic the brain's architecture for cognitive tasks with high efficiency and scalability. Intel Loihi is another advanced neuromorphic processor that supports on-chip learning and real-time adaptation. SpiNNaker is a large-scale neuromorphic computing system designed to simulate neural networks efficiently for research and complex applications.

Challenges:

Neuromorphic computing requires complex hardware design and specialized components, making development costly and time-consuming. The implementation process is difficult due to the need for new algorithms and programming models. Additionally, there are limited development frameworks and tools available, which slows down research, adoption, and standardization in this emerging field.

Flowchart Diagram For Neuromorphic Computing



Conclusion

Neuromorphic computing represents a significant advancement in the field of artificial intelligence by bridging the gap between biological and machine intelligence. Its ability to deliver real-time, energy-efficient, and adaptive computing makes it a promising technology for future intelligent systems and next-generation applications.

-Sinjini Ghosal

EDGE AI: THE INTERNET YOU CAN'T SEE

When your devices start thinking for themselves

The smartest revolution is happening silently inside our devices.

You unlock your phone with a glance.
Your watch tracks your heartbeat.
Your camera captures the perfect night shot in seconds.
It feels effortless. Almost magical.
But behind these everyday moments lies a powerful shift in technology—one that is quietly changing how the internet works.
This shift is called Edge AI.
Unlike traditional artificial intelligence that depends on distant cloud servers, Edge AI brings intelligence directly to your device. It processes data locally, instantly, and often invisibly.
We are no longer just connected to the internet.
We are carrying it within us.

"The future of AI isn't in the cloud. It's in your pocket."

WHAT IS EDGE AI?

Traditional AI sends your data to servers and waits for a response. Edge AI removes this delay by processing everything directly on your device. It's the difference between asking someone for answers and already knowing them.

**Your smartphone is no longer just a device—
it's a thinking machine.**

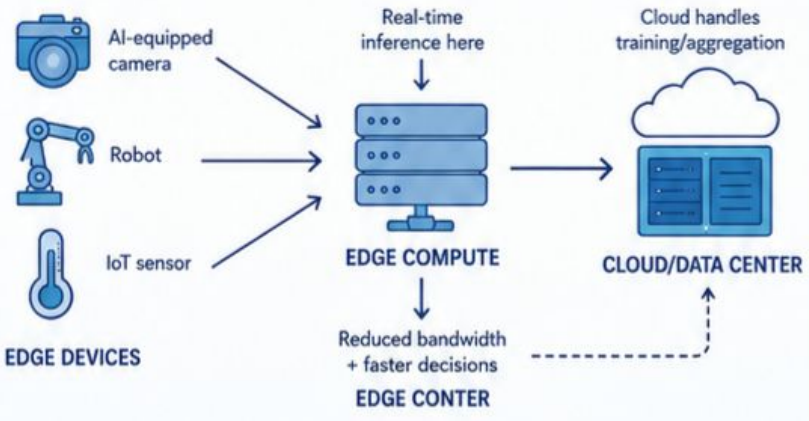
WHY EDGE AI MATTERS

Edge AI brings incredible speed to everyday tasks. Whether it's enhancing your photos or getting a response from your voice assistant, it all happens instantly—right on your device. There's no waiting, no lag—just seamless performance. Your personal data stays exactly where it belongs—on your device. It doesn't need to be sent to external servers, which means better privacy, stronger security, and complete peace of mind. Edge AI doesn't depend on the internet to get things done. From tracking your health to guiding you through unfamiliar routes, it works reliably even when you're offline.

WHERE YOU SEE IT

Edge AI is already a part of your daily life. In smartphones, it powers features like face unlock, real-time filters, and smart voice assistants, making your phone smarter and more responsive. In healthcare, wearable devices use Edge AI to detect heart irregularities and monitor your health in real time, helping save lives through early alerts. In automobiles, self-driving systems use Edge AI to sense their surroundings and make instant decisions, ensuring safer and smarter journeys. In smart homes, Edge AI powers voice recognition and intelligent automation, making your home more convenient, efficient, and secure.

What Happens Where: A Typical Edge AI Architecture



TECH BEHIND EDGE AI

AI Chips (NPUs): Fast, efficient processors designed to handle AI tasks right on your device.

Model Optimization: Advanced techniques that make AI models smaller in size, yet powerful in performance.

Federated Learning: A smarter way to learn and improve AI models without sharing raw data, keeping your information private.

Edge AI enables real-time decisions without relying on the cloud.

> ***"The best technology is invisible—
> you notice the experience, not the system."***

CHALLENGES

Like any powerful technology, Edge AI comes with its share of challenges. Devices have limited processing power, which can restrict the complexity of tasks they can handle. Running AI models directly on devices also consumes battery, a critical factor for portable gadgets. In addition, security risks at the device level remain a concern, as protecting data at the edge requires strong safeguards. Despite these challenges, rapid innovation is steadily overcoming these barriers.

THE HUMAN SIDE

We don't think about AI when unlocking our phones. We don't notice algorithms while clicking photos. We simply experience the result. And that's the beauty of Edge AI—it blends into our lives so seamlessly that it becomes invisible. It works in the background, quietly enhancing our experiences, making technology feel natural and effortless.

The future is intelligent, fast, and decentralized.

CONCLUSION: THE INVISIBLE INTERNET

We are moving from connected devices to intelligent devices.
Edge AI is quiet—but powerful.
Invisible—but transformative.
The future isn't somewhere far away.
It's already here.
In your phone.
On your wrist.
In your everyday life.

Edge AI: When Technology Stops Talking and Starts Thinking.

-SURJO CHOWDHURY

STUDENT ARTICLE · OPINION & REFLECTION

A Day Without Technology: Is It Possible?

Sritama Sengupta

echnology has silently woven itself into every corner of our lives. From the moment we wake up to the second we fall asleep, digital devices guide our routines, our relationships, and our thinking. But what would happen if, just for one day, all of it disappeared?

T

DEPENDENCE

Dependence on Technology

From morning to night, technology quietly controls many parts of our daily routine — and we often don't even realise it. A day without technology sounds deceptively simple, but in reality, it is anything but. We use it to study, to communicate, to travel, and even to relax. Without it, even small tasks start to feel difficult. How do we contact someone quickly? How do we find information instantly?

Difficulty in Daily Tasks

Even basic activities like setting reminders or finding directions suddenly become challenging without digital support. But as the day goes on, something interesting happens. Life begins to slow down. Conversations become longer and more meaningful. Instead of staring at screens, we start noticing the world around us — the sound of birds, the warmth of sunlight, the quiet presence of people sitting beside us.

REDISCOVERY

Rediscovering Simple Joys

In the absence of screens, we begin to appreciate small moments and feel more connected to real life. There is a sense of freedom in disconnecting, but also a quiet realisation: technology is no longer just a luxury. It has become a necessity. It connects us, supports us, and makes life easier in countless ways.

Conclusion

So, is a day without technology truly possible? Maybe yes — but not easy. And perhaps the real question is not whether we can live without it, but whether we can learn to live with it in a better, more balanced way.

> *"Perhaps the real question is not whether we can live without technology — but whether we can learn to live with it more wisely."*

CONTINUED FROM PAGE 1

The Bigger Picture

ANALYSIS

Communication

Without smartphones, emails, or social media, reaching someone becomes a walk or a handwritten note. We rediscover the patience and intention behind human connection. Conversations become more meaningful, and the absence of constant notifications allows us to be truly present with the people around us.

Learning

Without search engines, we rely on books, mentors, and personal memory. Learning becomes slower — but perhaps more deeply rooted. We engage with ideas for longer, think more critically, and appreciate the process of understanding rather than simply finding quick answers. Knowledge becomes something we build, not just something we look up.

Time & Rhythm

Without digital clocks and reminders, we reconnect with natural rhythms — sunrise, meals, the arc of daylight — and rediscover a pace that feels surprisingly human. Days are shaped by routine and awareness rather than alerts and alarms. This natural flow brings a sense of balance, calm, and real presence in the moment.

The Numbers Tell a Story

On average, people spend 6+ hours on screens every day. Around 80% check their phone within 15 minutes of waking up. We receive 2000+ app notifications per week, per user. Yet sometimes, all it takes is 1 day away from technology to truly notice the difference — in our focus, our mood, and our relationships.

A Closing Thought

Technology is not an enemy to be feared, nor a god to be worshipped. It is a tool — powerful, essential, and deeply human. The experiment of spending a day without it teaches us something valuable: we are more capable, more connected, and more present than we often believe. The goal is not to abandon technology, but to use it with intention, with awareness, and with gratitude for the quiet world that still exists beyond the screen.

About the Author

Sritama Sengupta · CSE Department Magazine

Words in their wildest form..

Where emotions
find language
and silence
learns to speak..
stories unfold
between the lines,
poetry lingers in pauses,
and imagination
spills beyond the page.

Suranjana Pandey

Belonging...

Togetherness is a warm sunset
where strangers turn into storytellers
and laughter echoes like a familiar song

Hearts that beat together
in a rhythm that's familiar
silences that settle like dust
in the spaces we occupy

laughter spills like summer rain
washing away the facades
eyes speak what words can't
"you're home, you're safe"

and in that space, we find
a quiet sense of belonging
a love that stays with us
long after the moment ends

Shristi Srivastava

Finding Strength in the storm

College life isn't just exams, deadlines, and late-night assignments. Sometimes, it's the battles inside your own mind—quiet, invisible, exhausting.

There were days when my thoughts raced faster than I could catch them. Sleep felt like a stranger, and even small tasks seemed impossible. I wondered if anyone else understood what it felt like to carry so much inside.

Through that struggle, I learned something important: mental health isn't a destination—it's a journey.

Some days are harder than others, and that's okay. Taking a moment for yourself, talking to someone, or simply admitting that you're not okay—that's progress.

The hardest lesson was realizing that asking for help isn't weakness. It's strength. You don't have to fight every battle alone. Slowly, day by day, clarity replaced confusion, and small victories replaced despair.

Mental health isn't about perfection or constant happiness. It's about navigating your own mind with patience, understanding, and compassion.

Storms don't last forever—even the darkest clouds eventually pass.

There's help available everywhere, just ask for it.
And if there's no one around reach out to me.
I might be able to share the rain with with you.

-SURJO CHOWDHURY

Mosaic

Life unravels in messy threads
we weave and unravel, lost in the haze
Moments collide, memories linger
echoes of what's yet to fade

And we're chasing the light, we find our path
through the darkness, we find our voice
A whispered truth, a heart's wild cry
a longing that echoes, unspoken

In the night, we find our strength
in the brokenness, we find our way
Scars remain, but they shape us too
we find beauty in the shattered light

And we're left with the echoes of what was
the whispers of what could be
The silence of what will be
life's a crazy, precious thing
lost in the spaces between

Shristi Srivastava

The *Silent* Key-board

A VERSE

FREE VERSE

I

Keys that click but never speak,
Still they tell the truths we seek.

II

Stories written, codes designed,
All begin inside the mind.

III

Every press holds something new,
A world created just by you.

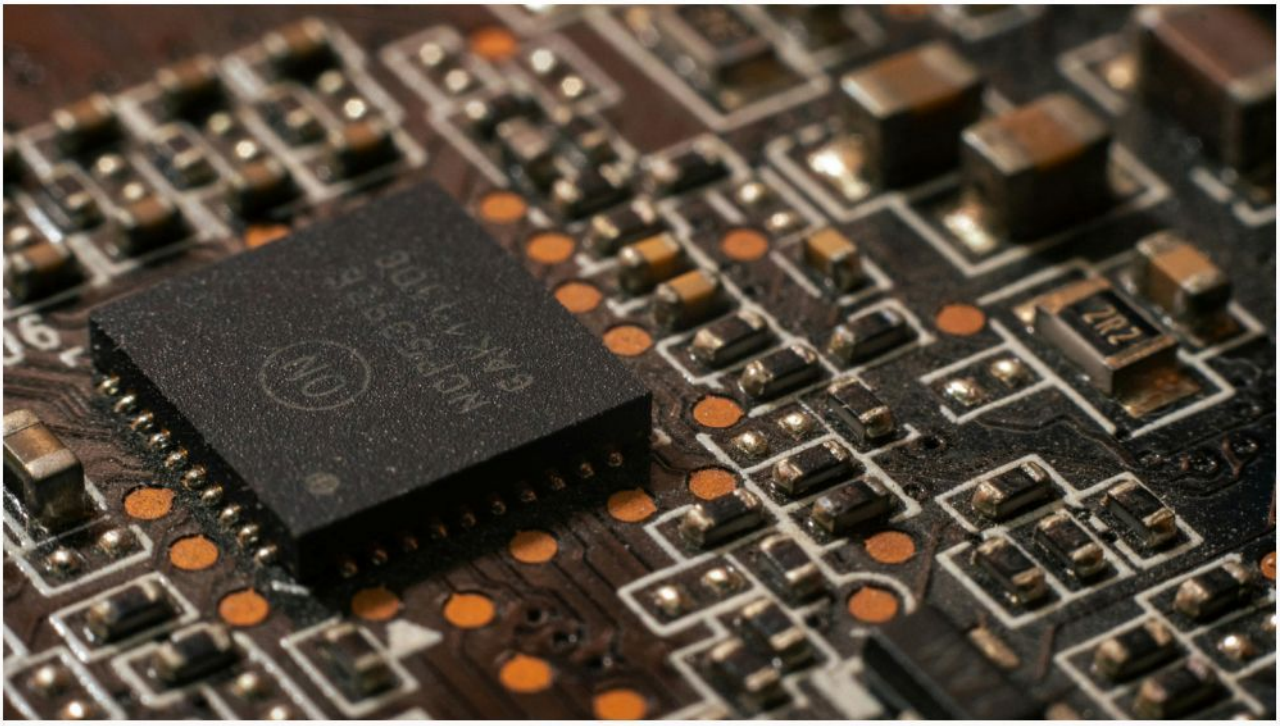
IV

Quiet tool yet strong and deep,
Holding secrets it will keep.

V

In its silence, power grows,
More than anyone really knows.

WRITTEN BY
Keya Mondal

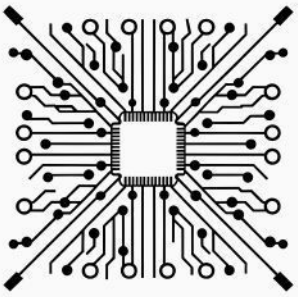


Where Circuits Dream

In quiet labs where midnight hums,
We trace our thoughts in wires and sums.
Between the lines of code and steel,
We build the things we cannot feel.

A spark, a flaw, a failed design—
Yet hope returns each single time.
For every error that we face,
Becomes a step we must embrace.

Not just machines, not just a plan,
But dreams that pass from mind to hand.
In every bolt, in every scheme,
An engineer learns how to dream.



SRITAMA SENGUPTA

When Things Don’t Go as Planned

Life doesn’t always go the way we think. We make plans and expect things to happen in a certain way, but many times it doesn’t.

I remember preparing for something really seriously, but the result was not good. It felt bad and honestly a little confusing too. I kept thinking what mistake I did, even when I tried my best.

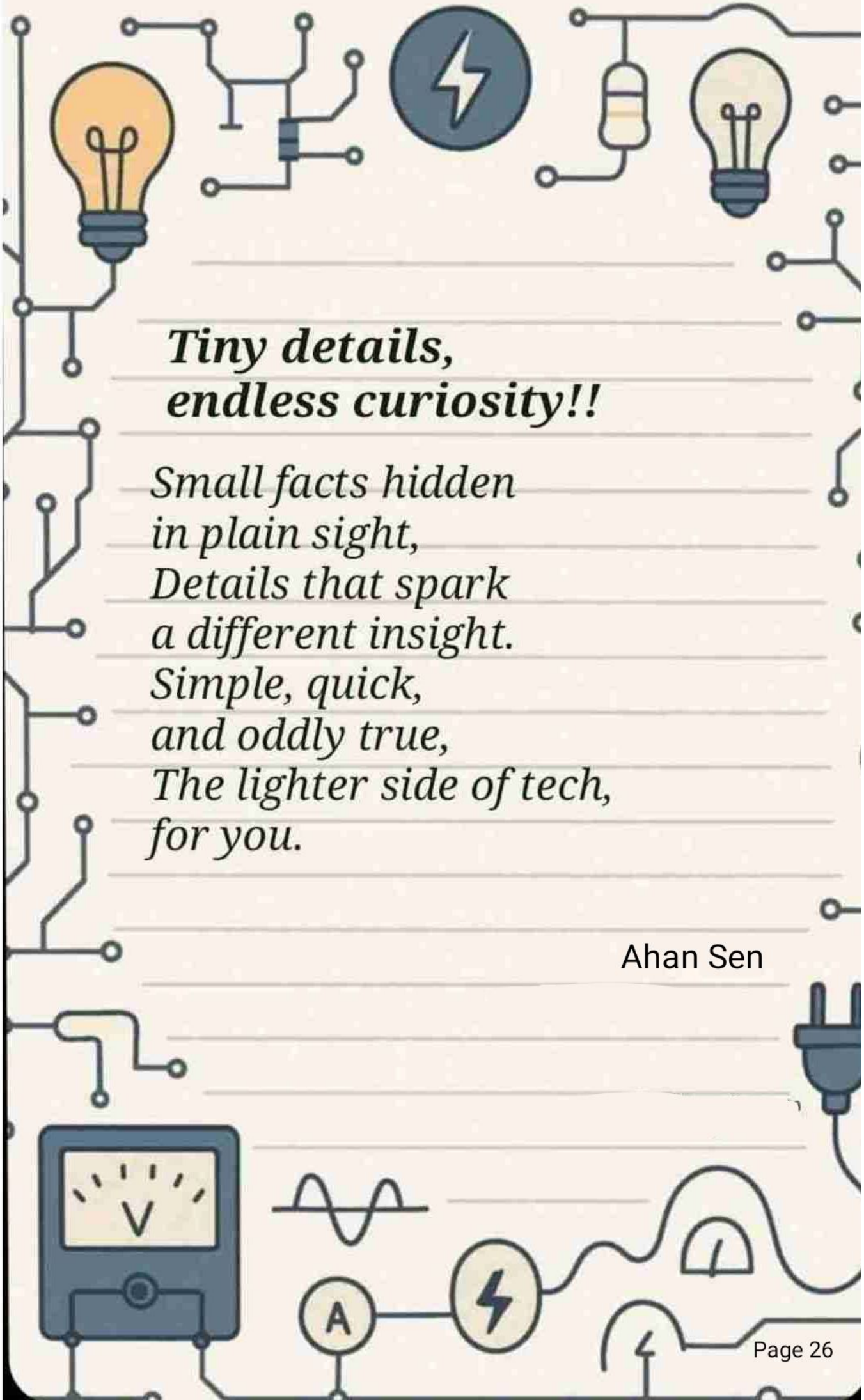
Slowly I understood that everything is not in our control. Sometimes things go wrong, not because we didn’t try, but because it just happens. It’s not easy to accept, but with time it becomes little easier.

These kind of situations actually teach us something. We become more patient and a bit stronger. Even if it doesn’t feel like it at that moment.

It’s okay to feel upset. We don’t have to act strong all the time. Talking to someone or just taking rest can help.

In the end, things may not go as planned, but they still take us somewhere. And maybe that’s also important.

SUBHADIP HUDAIT



Tiny details, endless curiosity!!

Small facts hidden
in plain sight,
Details that spark
a different insight.
Simple, quick,
and oddly true,
The lighter side of tech,
for you.

Ahan Sen

DID YOU KNOW?

FASCINATING FACTS ABOUT ENGINEERING & SCIENCE

01

GPS & RELATIVITY

The Global Positioning System would be off by kilometers daily without corrections from Einstein's Theory of Relativity.

02

BURJ KHALIFA

The Burj Khalifa is engineered to sway in the wind instead of staying completely rigid — a deliberate safety design.

03

SMARTPHONE POWER

A modern smartphone is more powerful than all the computers used in the Apollo 11 Moon Landing combined.

04

INTERNET & CODE

The entire Internet in operation weighs less than a strawberry. Tesla cars can contain over 100 million lines of code.

05

WATER JET CUTTING

Engineers can cut through solid steel using only high-pressure water — a technique called water jet cutting.

06

HUBBLE TELESCOPE

The Hubble Space Telescope operates in complete silence because sound cannot travel through the vacuum of space.

Creativity at it's Zenith..

Where brilliance becomes undeniable..
ideas breathe..
art evolves into masterpieces

Between Silence and Becoming..

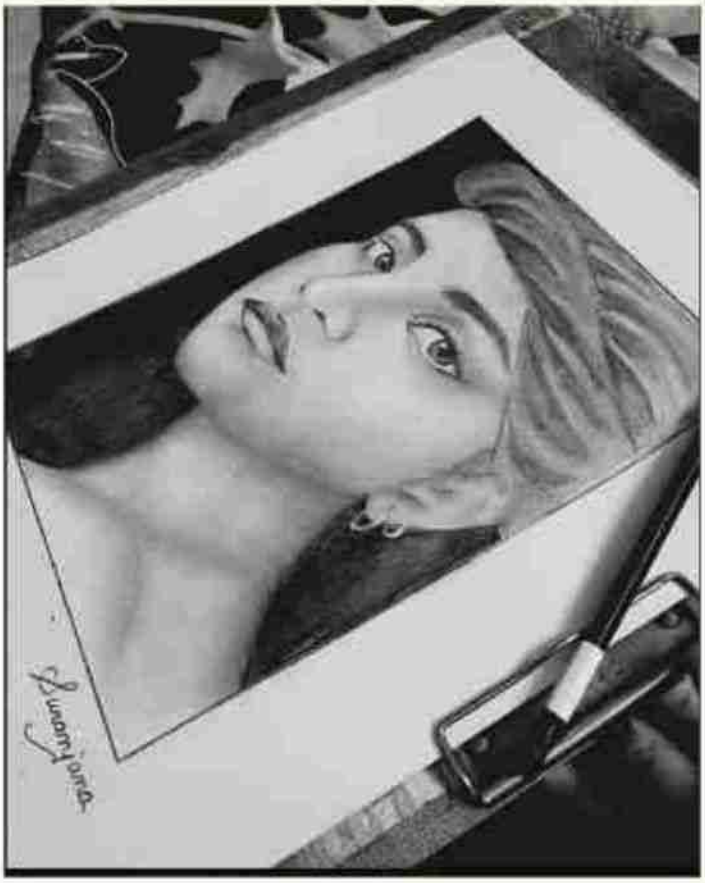
• Sacred Stillness

Rooted in cultural symbolism, this depiction of Lord Ganesha transcends ornamentation to evoke presence. The bold contrasts and luminous hues create a sense of divine immediacy.. both grounding and expansive. Here, stillness is not passive.. it is powerful. The figure embodies removal of obstacles not through action, but through being a quiet assertion of balance amidst chaos.

This work bridges the personal and the spiritual, suggesting that faith is not distant or abstract, but deeply intimate and continuously lived.

The Weight of an Unspoken Thought

Rendered in graphite, this portrait captures a moment between expression and restraint.
The subject's gaze is direct yet elusive, inviting attention while withholding clarity.



Rather than presenting identity as fixed, the piece frames it as something negotiated.. between what is seen, what is felt, and what remains unsaid.

Pedaling Through Memory

A fleeting moment of childhood
unfolds in soft washes and unfinished edges,
where motion feels more emotional than physical.

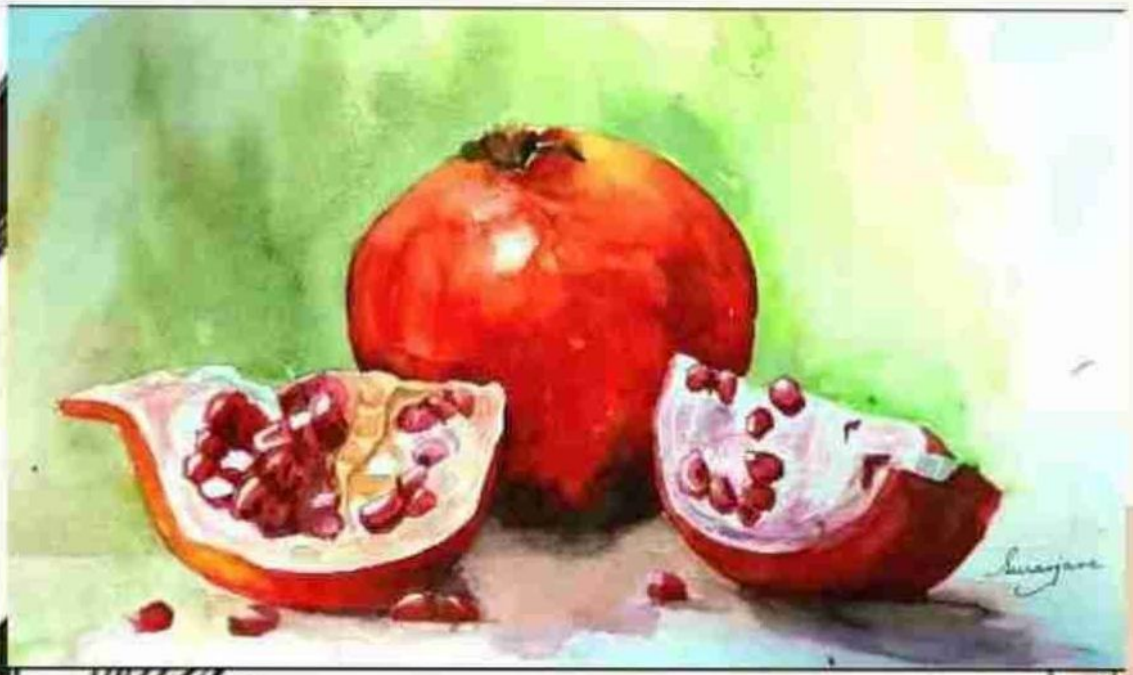
The boy, seen from behind,
becomes less an individual
and more a vessel of memory..
anonymous, universal, and deeply familiar.

The bicycle is not merely transport;
but transition..from innocence to awareness,
from presence to recollection.
The blurred greens and earth tones
mimic the way memory dissolves over time..
never fully lost, yet never entirely intact.

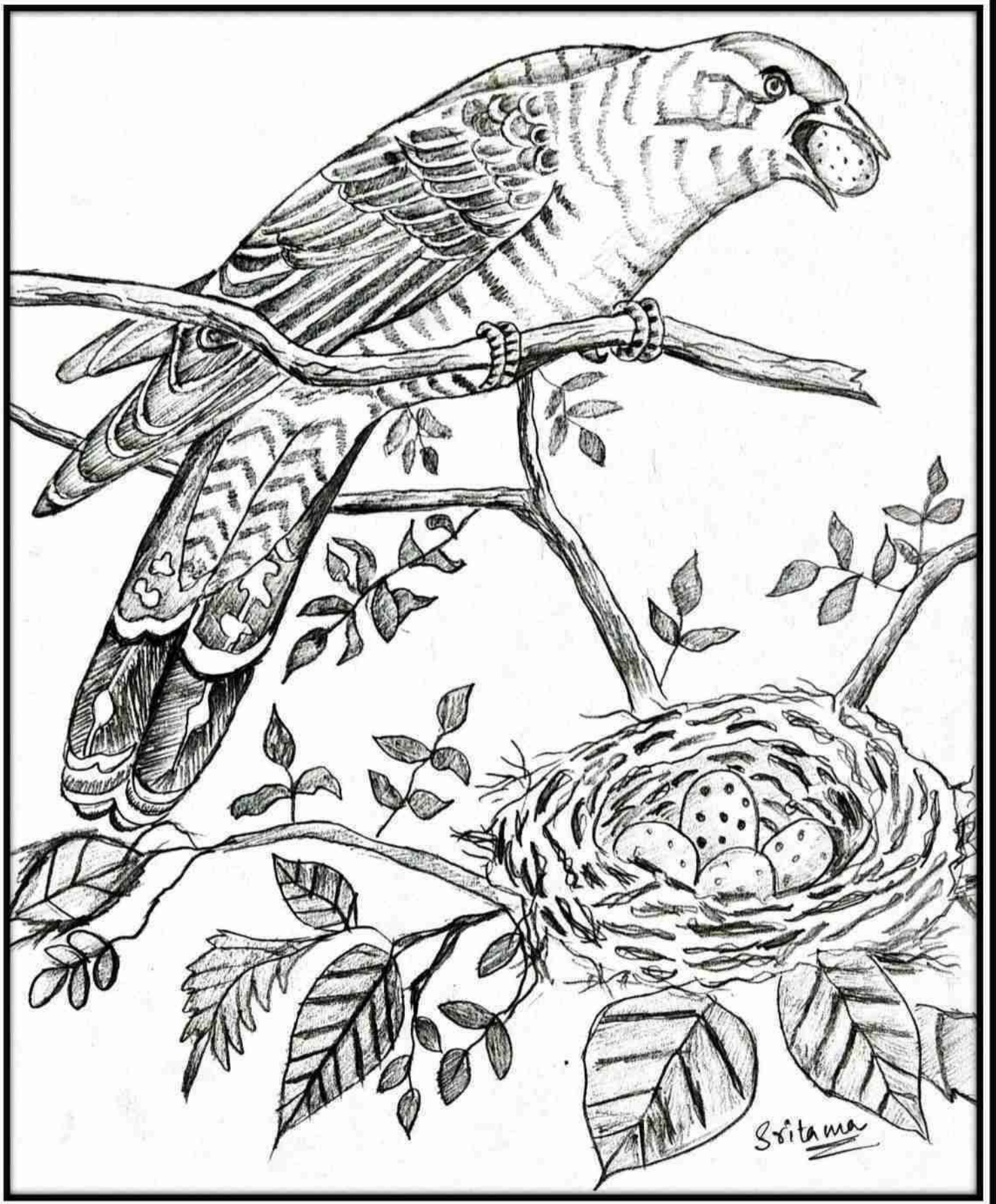
Ripe Impermanence

A study in color and texture,
this piece captures a moment of quiet abundance.
The pomegranate, split open,
reveals both fullness and fragility..
its scattered seeds echoing
the fleeting nature of beauty.

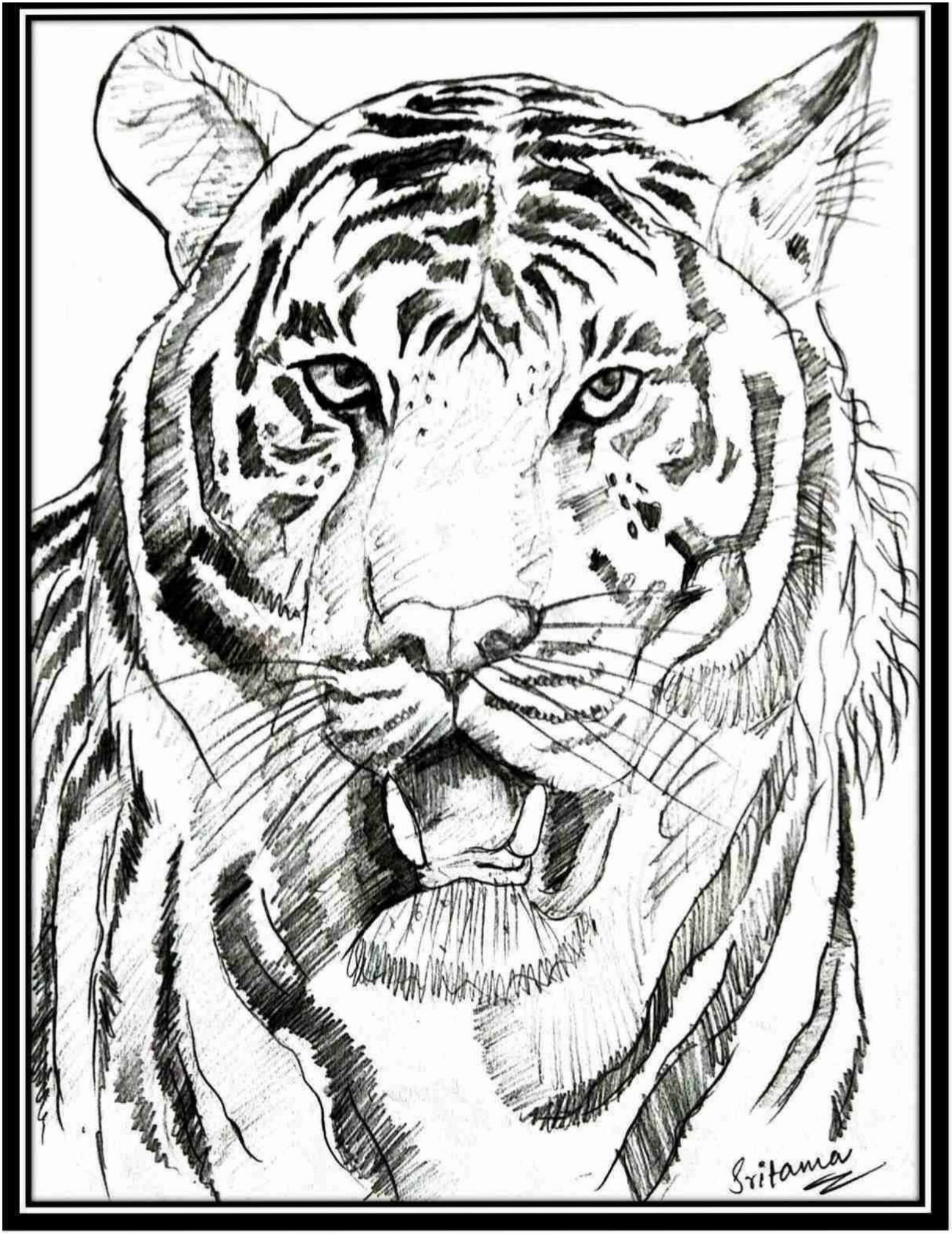
Rich reds against soft greens create
a delicate tension between vitality and decay,
reminding us that even in stillness,
time continues to move.



Suranjana Pandey



SRITAMA SENGUPTA



SRITAMA SENGUPTA

CARRYING ART

When a Simple Tote Becomes a Story

What started as a simple experiment with colors soon became something more—a way to turn everyday tote bags into stories worth carrying.

Some designs come alive on their own. The octopus, fluid and untamed, was painted almost instinctively—its movement captured in strokes that refused to stay still.

It represents freedom, chaos, and creativity without boundaries.

Unpredictable. Uncontained

Sometimes, simplicity speaks louder. A minimal design, a playful twist—the cat that quietly blends into the tote itself.

It's subtle, yet expressive. A reminder that art doesn't always need to be loud to be noticed.

Soft strokes. Quiet personality.

A little chaos, a lot of character

Inspired by the legendary Night Parade of One Hundred Demons, this piece captures a world where creatures of imagination roam freely.

Rooted in Japanese folklore, the parade is said to be a procession of spirits, monsters, and supernatural beings that emerge after dark—unpredictable, chaotic, and mesmerizing.

Through bold lines, intricate details, and contrasting colors, this design attempts to echo that same energy—a collision of the eerie and the playful. It's not just a visual, but a story unfolding, where every character seems to carry a life of its own.

"No two totes are ever the same—and that's what makes them special."

Some of these creations have found homes with people who appreciate handmade art, and a few are available for those who wish to carry a piece of it.

It's not just a tote bag. It's a story you can carry.

-SURJO CHOWDHURY

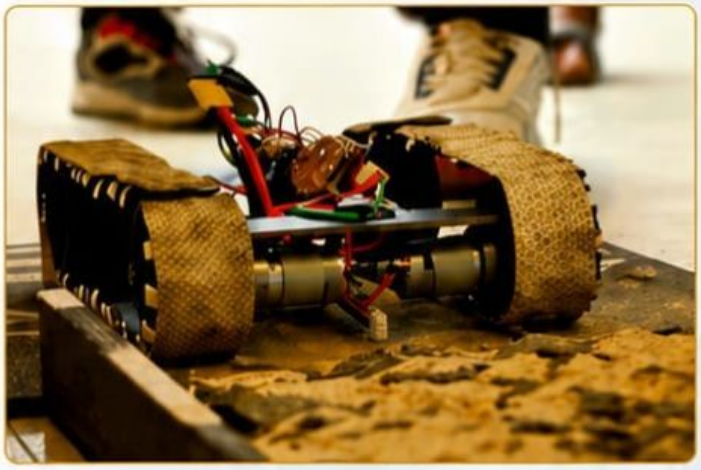
CSE ACHIEVERS

CELEBRATING EXCELLENCE. INSPIRING FUTURES.

1. **Sayandip Bhattacharyya**, CSE (2021-25 batch) secured 2nd runners up position in the prestigious **OpenAlmer Machine Learning Hackathon** , at SRIJAN, the Annual Techno-Management Fest, hosted by Jadavpur University on March 23, 2024.

2. CSE students **Sayandip Bhattacharyya**, **Rahul Sinha**, and **Parthiv Modak** bagged the 1st position in **SAP ICOE Hackathon** among 400+ teams. The event was organized by the International Center of Excellence for AI, Data Science, and Futuristic Technologies on 27th April, 2024.

3. CSE 3rd yr students **Arjun Datta** and **Chandrasish Bhattacharya** won the 1st prize in RoboRace, at Manthan TechFest organized by Dr. Sudhir Chandra Sur Institute of Management and Technology.



"Every achievement begins with the decision to try."

GATE & CMAT ACHIEVERS 2025

Celebrating Excellence. Inspiring Futures.

GATE TOPPER

Sl. No.	Name	Exam	Rank/percentile
1.	Sayak Sen	GATE (DA)	602

OTHER GATE & CMAT ACHIEVERS

Sl. No.	Name	Exam	Rank/percentile
2.	Sayak Sen	GATE (CS)	2140
3.	Kiran Chakrabarti	GATE (CS)	3012
4.	Kumar Souvik Chatterjee	GATE (CS)	5005
5.	Rohan Sen	GATE (CS)	5088
6.	Atanu Ghosh	GATE (CS)	7593
7.	Sougata Maity	GATE (DA)	8913
8.	Ipsita Mitra	GATE (CS)	8939
9.	Debmalya Chattopadhyay	GATE (CS)	10574
10.	Pankaj Goel	CMAT	98.38 percentile

GATE qualifiers in 2025 – to appear in MAY 2025 issue

TOP ACHIEVER

SAYAK SEN

GATE AIR **602** (DA)

GATE AIR **2140** (CS)

OUR PROUD ACHIEVERS

Kiran Chakrabarti (GATE)

Kumar Souvik Chatterjee (GATE)

Rohan Sen (GATE)

Atanu Ghosh (GATE)

Sougata Maity (GATE)

Ipsita Mitra (GATE)

Debmalya Chattopadhyay (GATE)

Pankaj Goel (CMAT)

Sl. No.	Topic of Activity	Activity Type	Activity Date	Resource person/Industry	Industry
1	Generative AI and Prompt Engineering	Workshop	31/08/2024	Mr. Mahendra Dutta	Ardent Computech. Pvt. Ltd.
2	Industry Talk on DevOps	Industry Talk	19/09/2024	Mr. Rohan Sinha, Mr. Kaustav Chakraborty	Tata Consultancy Services, Kolkata
3	Seminar on Trending Technologies for Placements	Seminar	28/11/2024	Mr. Rajmohan De Sarkar	Ardent Computech. Pvt. Ltd.

Workshop on Generative AI and Prompt Engg

Industry Talk on DevOps

Trending Technologies

Seminar on

Ayusi Dey, CSE 4th yr received a second offer for Software Dev Engineer Intern from Amazon

Sl. No.	Topic of Activity	Activity Type	Activity Date	Resource person/Industry	Industry
4	Seminar on Awareness for Internship	Seminar	01/03/2025	Mr. Rajmohan De Sarkar	Ardent Computech. Pvt. Ltd.
5	NoSQL with MongoDB	Gap Lecture	06/03/2025, 11/03/2025	–	Ardent Computech. Pvt. Ltd.

Women's throwball team became **Runners-Up** in Inter College Throwball tournament held at ILead campus, March 2025. Team comprised of CSE students Shreya Dhar (CSE 4th yr), Arpita Roy (CSE 3rd yr), Anjali Kumari (CSE 3rd yr), Soumi Maji (CSE 2nd yr)

Seminar for Awareness on Internship

DBMS Gap Lecture (March)

DBMS Gap lecture on NoSQL using MongoDB – for CSE 3rd yr students (6th & 11th March)

CSE students **Arjun Datta**, Chandrasish Bhattacharya, Kaushiki Mandal, Soumili Saha, Rachit Jaiswal, Akashat Ojha winners in the event **Line Follower Robot** at the JISTech2K25 on 26th March, 2025.

PUBLICATIONS

1. **Mr. Proshanta Sarkar,** Mr. Amitava Podder, Ms. Taruna Chopra, Mr. Manab Kr. Das, **Ms. Pooja P. Raj,** "ARTIFICIAL INTELLIGENCE: PROBLEM SOLVING ALGORITHMS", Alpha International Publication, 2024. ISBN NO: 978-93-5762-287-5 **[Text Book]**

2. **Barnita Das, Bikromadittya Mondal,** Rahul Sinha*, "Exploring Fusion Centrality in Developer Social Networks," in proceedings of the IEEE International Conference on Big Data Analytics in Bioinformatics (DABCon-2024), Kolkata, India, November 21-23, 2024. https://doi.org/10.1109/DABCon63472.2024.10919331

3. **Amit Khan,** Dipankar Majumdar, **Bikromadittya Mondal,** "Judging the Psychological Impact of News Articles on Rehab Patients: A Deep Learning Approach", In Proceedings of IEEE International Conference on Communication, Computing and Signal Processing (IICCCS), ASANSOL, India, 19-20 September, 2024, pp. 1-5. https://doi.org/10.1109/IICCCS61609.2024.10763606

4. **Saksham Sneh Mandal*, Ananya Kanjilal,** "Requirement-Driven Developer Recommendation Framework Based on Github Developer Social Network", Book Chapter, Lecture Notes in Networks and Systems, LNNS, Vol 1010, Intelligent Computing Systems and Applications, Springer Nature, Proceedings of ICICSA 2023, 20 September 2024, pp. 231-246 (Scopus indexed) https://doi.org/10.1007/978-981-97-5412-0_17

5. **Abhijit Bhattacharya, Kamlesh Kumar Dubey, Bikromadittya Mondal,** "Volume Like Elements of an -Dimensional Simplex in Non-Euclidean Spaces", in Siberian Mathematical Journal (Science Citation Index Expanded, Scopus indexed, impact Factor 0.7(2023)), Volume 65, Issue 4, pp. 878–898, 2024. https://doi.org/10.1134/S0037446624040141

6. **Manab Kr. Das, Proshanta Sarkar,** Priti Deb and Indrajit De, "IoT Enable Secure Remote Patient Health Monitoring for Treatment Optimization", International Conference on Artificial Intelligence and Sustainable Computing (AISC 24), Springer **(Scopus indexed) [In Press]**

7. **Prasenjit Das, Manab Kr. Das** and **Proshanta Sarkar,** "Machine Learning based Crop Recommendation System for Modern Agriculture: A Hybrid Approach", International Conference on Artificial Intelligence and Sustainable Computing (AISC 24), Springer **(Scopus indexed), [In Press]**

8. **Sayandip Bhattacharyya*, Maaitrayo Das*,** Amlan Raychaudhuri, Satyabrata Maity, Amlan Chakrabarti and Debotosh Bhattacharjee, "CarNet: An Innovative Cost-effective Driver Monitoring System Using CNN", 1st International Conference on Artificial Intelligence & Sustainable Computing (AISC 2024), (July 2024), Springer. **[In Press]**

9. **R. Majumder, A. Dutta, R. Bhattacharya,** and R. K. Pal, "A Hybrid BAT Algorithm for Scheduling Droplet Mixing Operations in Digital Microfluidic Biochips," *Proceedings of 27th International Symposium on VLSI Design and Test* (VDAT-2023), Oct 2024, pp. 185-200, Springer Nature. 2025, DOI – https://10.1007/978-981-97-3756-7

*Student authors

CSE 3rd yr student **Arin Sen**, part of the winning team **"ARES"** at ESPECTRO25, techfest of Kalyani Govt. Engineering College KGEC on March 25, 2025. They won **1st** position at **Ro-Soccer** and **3rd** position at **Ro-Turbulence**

PUBLICATIONS

1. Arnab Kumar Ghoshal, **Nabanita Das**, Soham Das, and Subhankar Dhar, "Minimizing spread of misinformation in social networks: a network topology based approach", Social Network Analysis and Mining, Springer, Vol. 15, Article No. 15, March 2025 (Scopus)

2. Amit Khan, Dipankar Majumdar, **Bikromadittya Mondal**, "A hybrid transformer based model for sarcasm detection from news headlines", Journal of Intelligent Information Systems, (Science Citation Index Expanded, impact Factor 2.3), 2025.
https://doi.org/10.1007/s10844-025-00941-9

3. Amit Khan, Dipankar Majumdar, **Bikromadittya Mondal**, "Sentiment analysis of emoji fused reviews using machine learning and Bert", in Scientific Reports (Science Citation Index Expanded, impact Factor 3.8), 15, 7538, 2025.
https://doi.org/10.1038/s41598-025-92286-0

4. Chanda, R., Chanda, A., Chanda, J. (2025). A Holistic Approach to the Prediction of Football Matches Using Machine Learning. In: Chaki, R., Cortesi, A., DasGupta, S., Saha, S. (eds) Smart Systems and Wireless Communication. SSWC 2024. Smart Innovation, Systems and Technologies, vol 433. Springer, Singapore.
https://doi.org/10.1007/978-981-96-1348-9_3