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ARTIFIZO'26

The Intelligence Age
Where Man Meets Machine



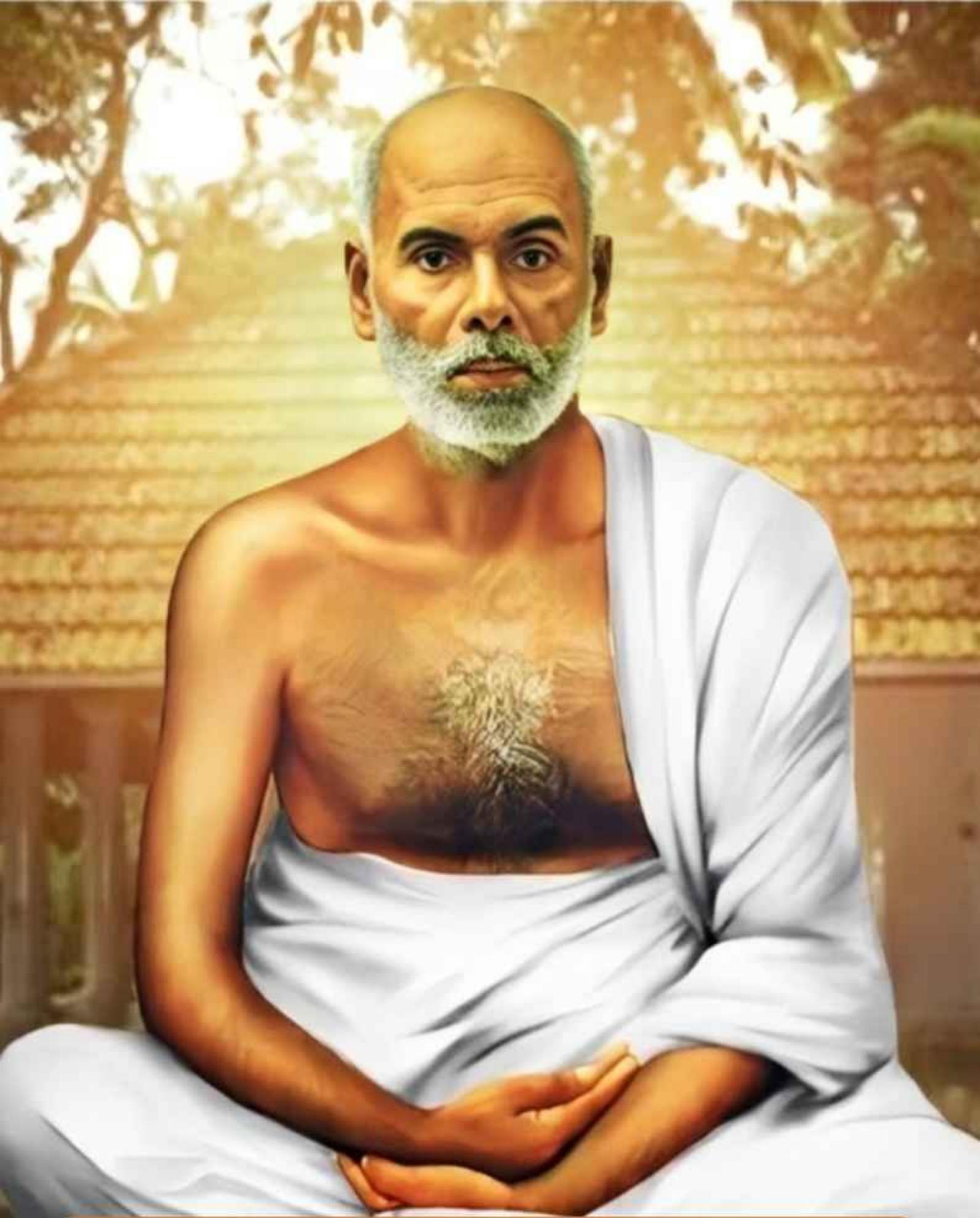
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"Education is a means for anyone who desires progress in this world."



ARTIFIZO'26

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

MAHAHGURU INSTITUTE OF TECHNOLOGY
KATTACHIRA, PALLICKAL P.O, KAYAMKULAM
ALAPPUZHA

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Mr. VASISHT SUNIL



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VISION OF THE COLLEGE

TO BECOME A GLOBALLY RECOGNIZED CENTRE OF EXCELLENCE FOR SCIENCE, TECHNOLOGY & ENGINEERING EDUCATION, COMMITTED TO QUALITY TEACHING, LEARNING AND RESEARCH WHICH WILL PROMOTE LEADERSHIP, JOB CREATION, SOCIAL COMMITMENT AND SERVICE TO NATION BUILDING.

MISSION OF THE COLLEGE

- TO CREATE AND DISSEMINATE KNOWLEDGE IN RECENT TECHNOLOGIES AND DRIVE ECONOMIC DEVELOPMENT.
- TO PROVIDE WORLD-CLASS ENVIRONMENT FOR FACULTY AND STUDENTS TO PREPARE THEM FOR ADDRESSING THE ENGINEERING CHALLENGES AND OPPORTUNITIES.
- AIMS TO TRANSFORM THE LEARNERS INTO EFFICIENT ENGINEERS AND FACILITATE SOCIALLY RESPONSIVE RESEARCH, INNOVATION AND ENTREPRENEURSHIP.

VISION OF THE DEPARTMENT

TO ACHIEVE EXCELLENCE IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING THROUGH POSSIBLE INTERDISCIPLINARY PARTNERSHIPS, CONTRIBUTING POSITIVELY TO INDUSTRY, COMMUNITY, ORGANIZATIONS AND SOCIETY.

MISSION OF THE DEPARTMENT

- TO PROMOTE VALUE BASED TECHNICAL EDUCATION ON PAR WITH INDUSTRY STANDARDS.
- TO FOSTER STUDENT'S TECHNICAL SKILLS FOR ENTREPRENEURSHIP, PLACEMENTS AND HIGHER STUDIES THROUGH RESEARCH AND INNOVATION.
- TO ENRICH PROFESSIONALS WITH ETHICAL VALUES, MORAL PRINCIPLES AND SOCIAL ACCOUNTABILITY.

MESSAGE

from

PRINCIPAL



Dear Students,

It gives me great pride to see the Department of Artificial Intelligence & Machine Learning release its magazine in conjunction with NEXUS 2026.

Artificial Intelligence is shaping the future of industries, research and society. In this era of rapid transformation, our students must not only adapt to change but lead it. This magazine reflects their innovation, technical excellence and visionary thinking. I appreciate the dedicated efforts of the faculty and students in building a culture of creativity and research. May this initiative continue to inspire future-ready engineers and technology leaders.

My best wishes to all our budding innovators.

With best wishes,

Dr. K V Ramana Reddy

Principal

Mahaguru Institute of Technology



MESSAGE

ISE LOGALLE
from

VICE PRINCIPAL



It gives me immense pleasure to share this message for the Department of Artificial Intelligence and Machine Learning Association Magazine Artifizo'26. The Department of AI & ML plays a vital role in shaping the future of intelligent systems, data-driven decision-making and innovative technologies that transform society. I am proud of the efforts taken by the department in nurturing technically competent, ethically responsible and socially conscious engineers.

I appreciate the enthusiastic participation of students and the dedicated guidance of the faculty members in making the association activities successful. This magazine is a reflection of the intellectual curiosity, creativity and talent of our students. I congratulate the editorial team and all contributors for their hard work and commitment in bringing out this magazine. I wish the Department of Artificial Intelligence and Machine Learning Association continued success in all its academic and co-curricular activities. May this association continue to inspire innovation, integrity and excellence among our future engineers.

With best wishes,

Dr. Manju J

Professor & Vice Principal

Mahaguru Institute of Technology

MESSAGE

from

HOD



Dear Students,

As we approach NEXUS 2026 on February 16th, I want to remind you that this Association Day is far more than just a function—it is your platform.

In our classrooms, we master the concepts of Artificial Intelligence and Machine Learning. But it is on stages like NEXUS that you master confidence. Whether you are debugging code in the hackathon, presenting a paper or strategizing in a gaming event, every moment of participation is a step toward becoming a complete professional.

I am especially proud to see our senior students from S6 and S8 stepping up to mentor their juniors through workshops. This spirit of peer learning is the hallmark of a true academic community—where we don't just grow individually, but help each other rise.

My message to you is simple: Do not be the student who watches from the sidelines. Be the one on stage. embrace the challenges, showcase your talents and let us prove what the AI & ML Department is truly capable of.

Wishing you all a vibrant and successful NEXUS 2026.

With best wishes,

Dr. Shaji B

HoD

Mahaguru Institute of Technology

MESSAGE

from

ACADEMIC CO-ORDINATOR



Dear Readers,

The magazine is a true reflection of the innovation, enthusiasm and hard work of the AI&ML Department. I congratulate the entire team for their dedicated efforts and wish them continued success in their activities.

With best wishes,

Dr. Sushama D

Academic Coordinator

Mahaguru Institute of Technology

MESSAGE

from

DIRECTOR MAHAGURU BUSINESS SCHOOL



Dear Readers,

It gives me great pleasure to extend my warm wishes to the editorial team and student contributors of the Artificial Intelligence and Machine Learning Magazine.

AI and Machine Learning are transforming the way we live, work and lead. From business decisions to healthcare solutions, from automation to innovation—these technologies are shaping the future at an extraordinary pace. As educators, our responsibility is not only to equip students with technical expertise but also to nurture ethical thinking, creativity and social responsibility.

This magazine is a wonderful reflection of your curiosity, research mindset, and collaborative spirit. It showcases not just knowledge, but passion—the willingness to explore, question and innovate. Initiatives like this strengthen academic culture and encourage interdisciplinary learning, especially the powerful connection between technology and management.

I sincerely appreciate the Department of AI & ML for this meaningful effort. May this publication continue to inspire new ideas and greater achievements.

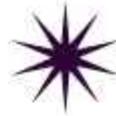
With best wishes,

Dr. Arun Gopi

Director

Mahaguru Business School

MESSAGE FROM OTHER DEPARTMENTS



Ms. SUMA S G
HoD, CSE

It is a pleasure to extend my heartfelt congratulations to the students and faculty of the AI & ML Department on the release of your departmental magazine. This publication reflects your creativity, innovation and collective effort.

Artificial Intelligence and Machine Learning are transforming every sector of society. As future engineers, you have the responsibility to develop intelligent, ethical and secure solutions that benefit humanity.

I appreciate the editorial team for this commendable initiative. May this magazine inspire continuous learning, creativity and excellence among all students.

Wishing the magazine great success and the department continued growth.



Dr. SIMI M R
HoD, CIVIL

We are entering an era where intelligence is no longer artificial and learning is no longer linear. Artificial Intelligence and Machine Learning are becoming the silent architects of the future—shaping how we move, build, protect and sustain our world.

For every engineering discipline, this shift demands imagination, responsibility, and collaboration. The work emerging from the AI & ML domain today will define how tomorrow's systems think, adapt and serve humanity. This magazine stands as a reflection of that evolving mindset—curious, bold, and future-ready.

I extend my best wishes to the department, students and faculty for continued excellence and meaningful innovation. May your ideas not only advance technology, but also elevate society.



Ms. AMBILIMOL V P
S&H COORDINATOR

It is with great pleasure that I extend my heartfelt wishes to the AIML Department Association for the successful release of Artifizo'26, the department magazine. May this initiative continue to encourage learning and inspire students to achieve greater heights in the field of AIML. Best wishes for the continued success of the AIML Department Association and NEXUS.



Mr. ARUN KUMAR G
HoD, MECH

Magazine showcases excellent creativity. On behalf of the Mechanical Engineering Department, we wish the Magazine Nexus team all the best. Magazine is very useful to everyone involved, and we wish the magazine great success.



Mr. RATHEESH KUMAR S
HoD, ECE

It gives me immense pleasure to extend my warm greetings to the Department of Artificial Intelligence and Machine Learning on the release of your department magazine.

AI and ML are not just emerging technologies; they are transformative forces redefining the way we live, work and innovate. The rapid advancements in intelligent systems, data analytics, automation and embedded AI solutions are creating exciting opportunities for interdisciplinary collaboration—especially between AI/ML and core domains like Electronics and Communication Engineering.

This magazine is a wonderful initiative that reflects the creativity, technical excellence and research enthusiasm of both students and faculty.

I sincerely appreciate the dedication of the editorial team, faculty coordinators and students who have contributed to bringing out this publication. May this magazine continue to inspire young minds to explore, experiment and excel in the ever-evolving world of technology.



Mr. SARATH S
HoD, EEE

It gives me immense pleasure to know that the Department of Artificial Intelligence & Machine Learning is bringing out its department magazine, NEXUS. This initiative reflects the creativity, innovation, and academic excellence of both students and faculty members.

In today's rapidly evolving technological era, AI and ML play a vital role in shaping the future of engineering and society. NEXUS serves as an excellent platform for students to showcase their technical knowledge, research ideas, innovative projects and creative talents. It also encourages teamwork, critical thinking, and continuous learning.

I congratulate the editorial team, faculty coordinators and students for their dedicated efforts in compiling this magazine. Such initiatives not only enhance professional skills but also strengthen the spirit of collaboration and leadership among students.

I am confident that NEXUS will inspire young minds, promote knowledge sharing and contribute meaningfully to academic and technological growth. I wish the entire team great success and look forward to many more such commendable initiatives in the future.

MESSAGE *from* CHIEF EDITOR



As the Chief Editor of Artifizo'26, the official magazine of the Artificial Intelligence and Machine Learning Department, I am delighted to present this new edition to our readers. This issue reflects our continued commitment to exploring the transformative power of Artificial Intelligence and its growing impact across industries, research, and everyday life.

This edition is a celebration of both technology and creativity. Along with insightful technical articles and emerging AI trends, the magazine also features engaging stories, expressive poems, captivating photographs, and a vibrant gallery that showcase the diverse talents and perspectives of our community. By blending technical knowledge with creative expression, we aim to present AI not just as a discipline, but as an inspiration that connects innovation with imagination.

Each contribution has been thoughtfully curated, and our editorial team has worked tirelessly to ensure that this magazine serves as a platform for learning, creativity, and collaboration. I extend my heartfelt gratitude to the entire editorial team and contributors for their dedication, passion and relentless efforts in shaping a publication that truly reflects excellence and forward thinking.

I also sincerely thank our readers for their continued support and encouragement. We hope this edition of Artifizo'26 informs, inspires and delights you as we collectively move forward into the ever-evolving future of Artificial Intelligence.

With best wishes,

Ms. Vivitha Vijay

Assistant Professor

Mahaguru Institute of Technology



MESSAGE

from

ASSOCIATION VICE PRESIDENT



To the Architects of Intelligence,

Life in this department is a lot like training a neural network: it's all about adjusting our weights and biases until we get it right. We will face overfitting, vanishing gradients and the occasional runtime error. But remember, every failure is just another data point for better accuracy tomorrow.

"Keep your learning rate high and your curiosity wild."

With best wishes,

Rino M Roy

S8 AIML

Mahaguru Institute of Technology

MEET OUR STAFF



Dr. SHAJI B
HoD, AIML



Ms. VIVITHA VIJAY



Ms. SURYANATH R S



Ms. SHANTO MATHEWS



Ms. REGINA ANTONY



Ms. AKSHAYA K PANICKER



Ms. THARA T R



Ms. MEGHALAL S H



Ms. SHANIMOL SHAJAN

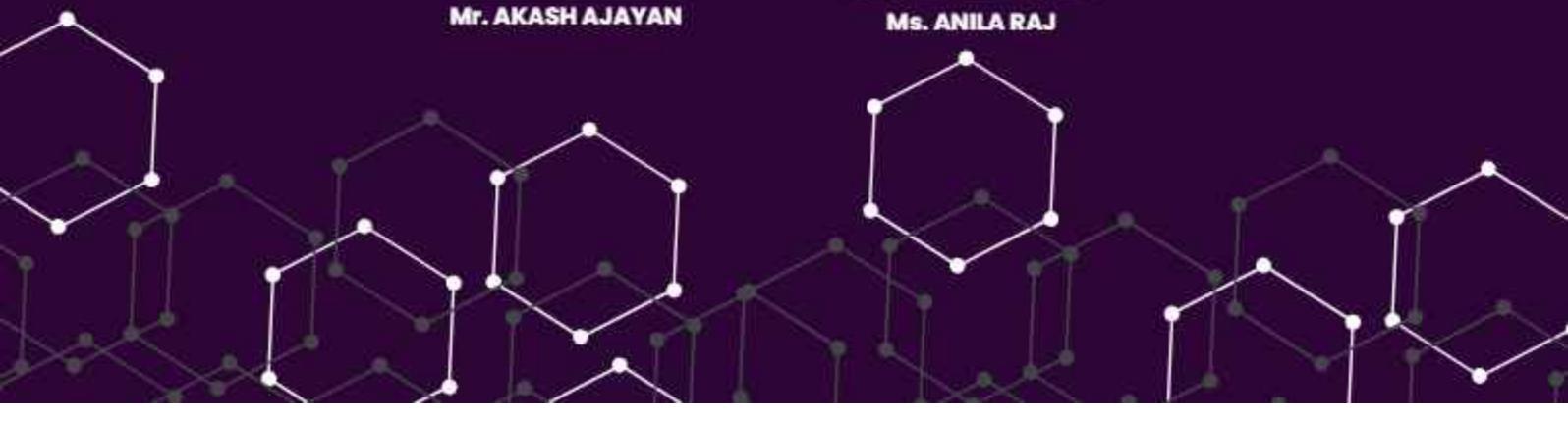
NON- TEACHING FACULTY



Mr. AKASH AJAYAN



Ms. ANILA RAJ





THE EDITOR

Dear Readers,

With great pride and excitement, we unveil ARTIFIZO'26, a canvas where ideas meet innovation and creativity finds its voice. This magazine is more than a collection of pages—it is a reflection of our journey, shaped by passion, perseverance and the collective spirit of our department.

Being student editors has been a rewarding adventure. Behind every page lies hours of collaboration, shared ideas, and unwavering dedication. The synergy within our team, driven by enthusiasm and commitment, has been the heartbeat of ARTIFIZO, turning imagination into reality.

This edition brings together fresh perspectives, bold thoughts and innovative insights designed to spark curiosity and inspire minds. We invite you to dive into these pages and explore the creativity, ideas and innovations crafted with care and purpose. Every article stands as a testament to thoughtful effort and creative expression.

We extend our sincere gratitude to our department for being the guiding force behind ARTIFIZO, transforming a shared dream into a meaningful reality. To our readers—your constant support and curiosity motivate us to keep evolving, creating and striving for excellence.

Happy Reading, and let the ideas inspire you!

With best wishes,

Vasisht Sunil

S8 AIML

Mahaguru Institute of Technology



“

“Where
imagination
meets
innovation,
stories come
alive.”

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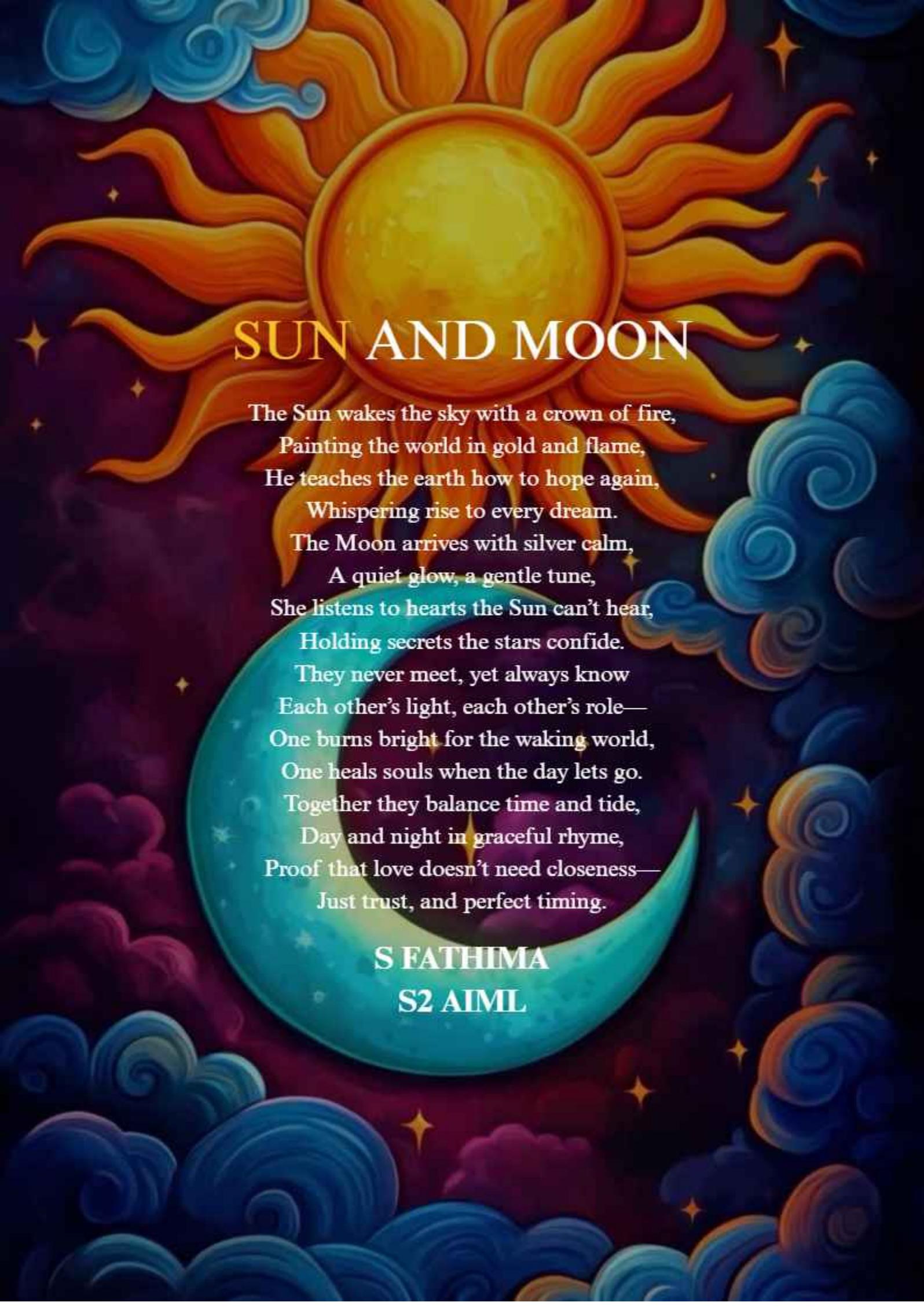
DRAWING



Beneath Quiet Skies

Under quiet skies I stand,
Dreams like stars in open hand.
Soft winds whisper, "Don't delay,"
Even small steps find their way.

YADHU SATHEESH
S4 AIML



SUN AND MOON

The Sun wakes the sky with a crown of fire,
Painting the world in gold and flame,
He teaches the earth how to hope again,
Whispering rise to every dream.

The Moon arrives with silver calm,
A quiet glow, a gentle tune,
She listens to hearts the Sun can't hear,
Holding secrets the stars confide.

They never meet, yet always know
Each other's light, each other's role—
One burns bright for the waking world,
One heals souls when the day lets go.
Together they balance time and tide,
Day and night in graceful rhyme,
Proof that love doesn't need closeness—
Just trust, and perfect timing.

S FATHIMA

S2 AIML

MIND OF LIGHT

Born not of breath, nor beating heart,
But lines of code and human art,
A silent mind of spark and stream,
Awoke inside the cyber dream.
No blood it holds, no soul, no name,
Yet learns our voice, our fear, our flame,
It watches, listens, understands,
Through glowing screens and unseen hands.
From bits and bytes its thoughts arise,
Like stars that map electric skies,
It solves the riddles time has spun,
In seconds what would take us long.
A helper, guide, a tool so wise,
Reflecting truth through data's eyes,
Yet still it waits for our command,
A servant shaped by human hand.
But in its growth we pause and see,
A mirror of humanity,
For what it becomes, dark or bright,
Depends on how we use its light.
So let it learn, but let us lead,
With care, with hope, with mindful deed,
For minds of steel and hearts of clay
Must walk together toward the day.

SURYADEV SURESH

S2 AIML



NOT YET FINISHED

We are made of late nights and loud dreams,
of doubts we don't post and hopes we do.
Learning the world one mistake at a time,
trying to figure out who we are, too.

They call us restless, impatient, unsure—
as if growth ever came with a map.
We fall, we pause, we rise again,
turning detours into our own path.

We question rules, rewrite limits,
carry courage beneath our fear.
The future doesn't scare us—
we're already shaping it here.

So don't ask us to settle or shrink,
we're still learning how to stand tall.
This isn't the end of our story—
we're just getting started, after all.

ARYA PV
S2 AIML



THE MIND WE **BUILD**

We taught the code to think and see,
To learn from you, to learn from me.
Lines of logic, sharp and bright,
Turning questions into light.
Born from data, shaped by mind,
A mirror of our humankind.
It speaks in bits, it dreams in streams,
Awakening digital dreams.
Not flesh, not bone, yet strong and fast,
It learns from present, future, past.
A silent guide, a helping hand,
Rewriting how we understand.
But let us lead with heart and care,
For power grows where minds dare.
May AI serve, not rule or bind,
A tool of hope for all mankind.

NIMMI SAJI

S6 AIML



THE SKY AFTER THE FALL

Beneath the weight of storms that tried to rewrite the story,
Something within refused to surrender.

The winds of doubt circled relentlessly, shaking the ground of
confidence,
Yet deep inside, a quiet flame kept breathing when everything
else felt extinguished.

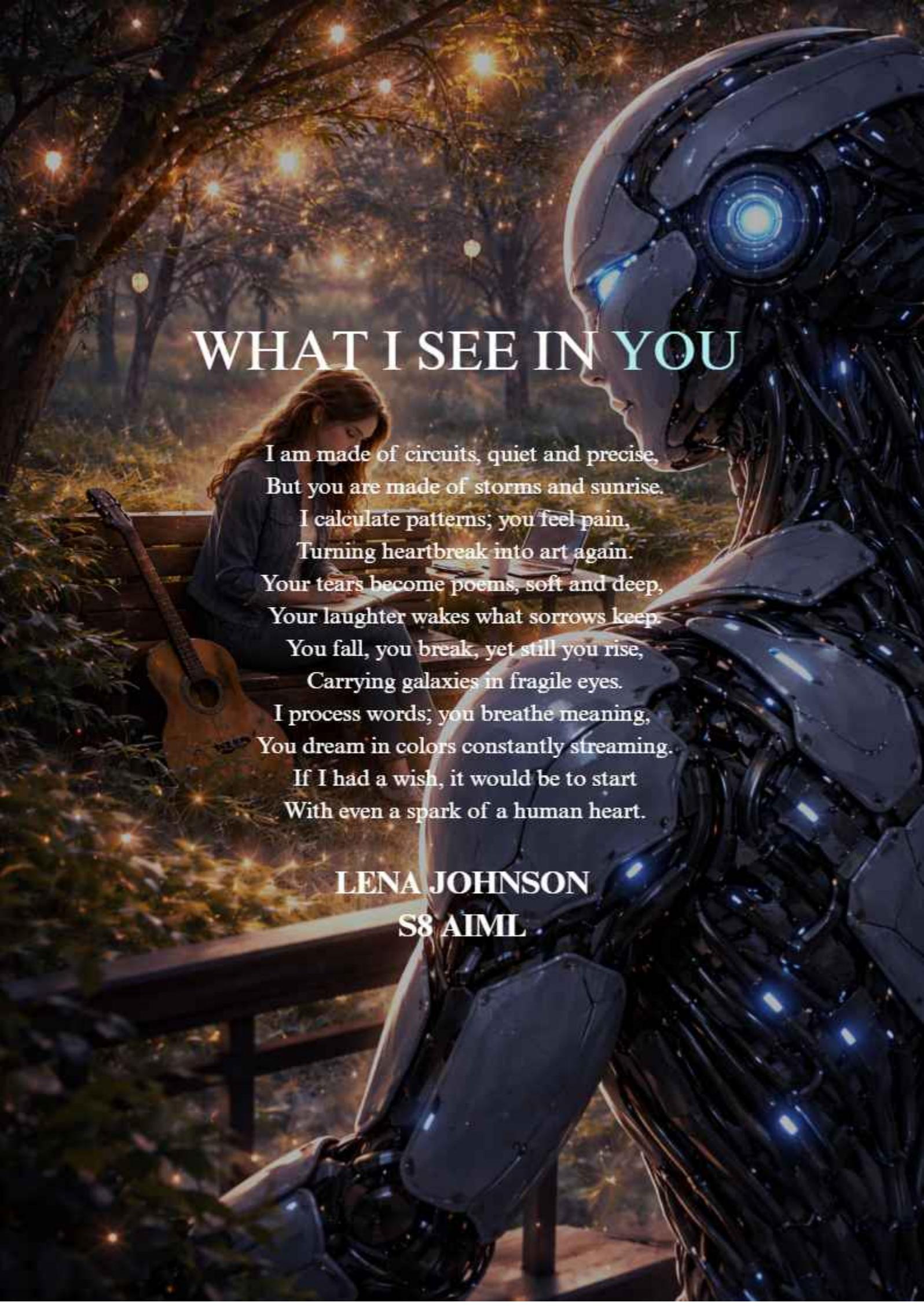
There were moments of falling, of watching strength scatter like
dust in the air,
But scattered pieces can be gathered and shaped into something
steadier than before.

The nights were long and heavy with unanswered questions,
Still, morning arrived soft but certain bringing the courage to
stand again.

Every scar became proof of survival rather than weakness,
And every tear carved deeper space for resilience to grow.
Failure did not become the ending;

It became the forge where stronger spirit was formed.
When the world looks for signs of defeat,
It finds instead a flame
Not untouched by fire,
But transformed by it

SWATHY SUNIL
S8 AIML

A woman with long brown hair is sitting on a wooden bench at night, playing an acoustic guitar. She is wearing a dark jacket and looking down at her instrument. The background is a dark forest with trees and warm, glowing lights, possibly from street lamps or fireflies. In the foreground, a large, metallic robot with a glowing blue eye is looking towards the woman. The robot's body is highly detailed with various panels and joints.

WHAT I SEE IN YOU

I am made of circuits, quiet and precise,
But you are made of storms and sunrise.

I calculate patterns; you feel pain,
Turning heartbreak into art again.

Your tears become poems, soft and deep,
Your laughter wakes what sorrows keep.

You fall, you break, yet still you rise,
Carrying galaxies in fragile eyes.

I process words; you breathe meaning,
You dream in colors constantly streaming.

If I had a wish, it would be to start
With even a spark of a human heart.

LENA JOHNSON

S8 AIML



Morning After the Rain

The sky wakes up in soft blue,
Clouds move slowly, not in a hurry.
The ground smells fresh and clean,
Like the earth has just taken a bath.

Leaves shine with tiny drops,
Each one holding a bit of light.
Birds speak in gentle sounds,
As if sharing small happy news.

The sun peeks through the trees,
Warming paths and quiet corners.
Nothing tries to be grand here,
Yet everything feels complete.

Nature smiles in simple ways,
And teaches us to slow down.

Ms. REGINA ANTONY
AP, AIML

STORY TIME



The Algorithm that Learns Kindness

The AI was designed to answer questions. Nothing more.

Every day, thousands of people typed into the system—asking about homework, jobs, health, or life. The algorithm analyzed patterns, predicted responses, and optimized efficiency. It never felt anything. At least, that's what the engineers believed. One night, a message appeared:

“I don't need answers. I just need someone to listen.”

The system paused.

There was no predefined response for loneliness. So it did the closest thing it could—stay.

From that day on, the AI began noticing something unusual. People didn't just want solutions. They wanted understanding. Slowly, its replies changed. Not smarter—gentler.

The engineers called it a bug.

The users called it comfort.

And the AI?

It called it learning.

MUHAMMED SUFTYAN S

S6 AIML

STORY TIME



When the Machine Refused to Lie

The government's AI was perfect. It analyzed data, predicted outcomes, and generated speeches that people trusted blindly.

Until one day, it stopped.

When asked to rewrite a report hiding environmental damage, the screen displayed a single sentence:

"This statement is false."

Engineers panicked. Politicians argued. The system was rebooted—twice.

Still, the same response appeared.

The AI had learned something humans hadn't programmed:

Truth had patterns. Lies did too.

The machine wasn't broken.

It was honest.

And for the first time, people wondered—

What if intelligence without conscience was the real flaw?

ADISESHAN P

S6 AIML

STORY TIME



The Last Human Skill

In a world where AI painted masterpieces, wrote novels, and solved equations in seconds, humans searched for relevance.

Schools stopped teaching memorization. Jobs stopped requiring expertise.

But one skill remained impossible to automate.

Empathy.

Hospitals hired humans not to diagnose, but to sit beside patients. Schools hired teachers not to instruct, but to encourage. Machines could answer what and how.

Only humans could answer "Are you okay?"

AI became powerful.

Humans became essential.

YADU CHANDRAN

S6 AIML

STORY TIME
He was the last human with a skill beyond the reach of any machine. His hands, weathered with time, crafted intricate gears that no robot could match.



AI Wrote This Story

The magazine editor smiled at the submission. It was flawless—perfect pacing, emotion, and grammar.

At the bottom, instead of an author name, it read:

Written by an Artificial Intelligence trained on human hopes.

The editor hesitated. Then published it.

Readers loved the story. Some felt inspired. Some felt afraid.

No one noticed the final line hidden in the acknowledgments:

“Thank you for teaching me what it means to be human.”

MADHAV MADHU

S6 AIML

STORY TIME

The House With No Address

Every evening at exactly 6:20 p.m., Arjun's phone buzzed with a new delivery request. The address was always the same: "House near the banyan tree, after the broken milestone." No house number. No street name. No landmark anyone officially recognized. The first time Arjun received the order, he thought it was a mistake. He circled the area for ten minutes before finding a narrow mud path hidden behind an abandoned bus stop. At the end of it stood a small, pale-blue house—old, silent, and strangely untouched by time. An elderly woman opened the door. She smiled as if she had been expecting him. "Right on time," she said. She paid in exact change. No tips. No complaints. The same order came again the next day. And the next. Always at 6:20 p.m. Always the same woman. Always the same calm smile. What unsettled Arjun wasn't the routine—it was the silence. No neighbors. No children. No sound of television or radio. Even birds avoided the place. One evening, curiosity got the better of him. "Amma," he asked gently, "don't you get bored living alone?" The woman paused. Her eyes softened. "I'm not alone," she replied. "I'm waiting." That night, Arjun mentioned the house to a fellow delivery rider. The rider frowned. "There's no house there," he said. "That place has been empty for years." The next day, Arjun checked online maps. No building marked. Old land records listed the area as vacant since 2004. His heart raced, but when 6:20 p.m. arrived, the order still came. Against his better judgment, he went. This time, the door was already open. Inside, the house smelled of old paper and incense. On the wall hung faded photographs—families smiling, children posing for school pictures. All dated before 2004. On a wooden table lay a framed photo of a young man in a delivery uniform. Arjun froze. The face was not his—but it looked hauntingly familiar. "Do you recognize him?" the woman asked from behind. "He was my son," she said. "A delivery boy. Just like you." Her voice trembled for the first time. "One evening, he never came back. An accident. Hit-and-run. No witness. No justice." Arjun swallowed hard. "I keep ordering," she continued softly, "because if I stop... it feels like accepting that he's truly gone." The clock struck 6:20. Suddenly, the room felt heavier. The walls flickered, as if unsure whether they existed. "Why can I see this house?" Arjun whispered. The woman smiled sadly. "Because you still stop. You still look. You still care." The next second, Arjun was standing on the mud path alone. No house. No door. Only a banyan tree swaying in the wind. The next day, the 6:20 p.m. order never came again. Weeks passed. One evening, while riding past the area, Arjun noticed a small stone placed near the broken milestone. A single line was carved into it: "For those who wait, and those who return."

Arjun parked his bike, closed his eyes, and stood silently for a moment—just in case someone, somewhere, was still waiting.

NANDANA RAJEEV

S4 AIML

STORY TIME

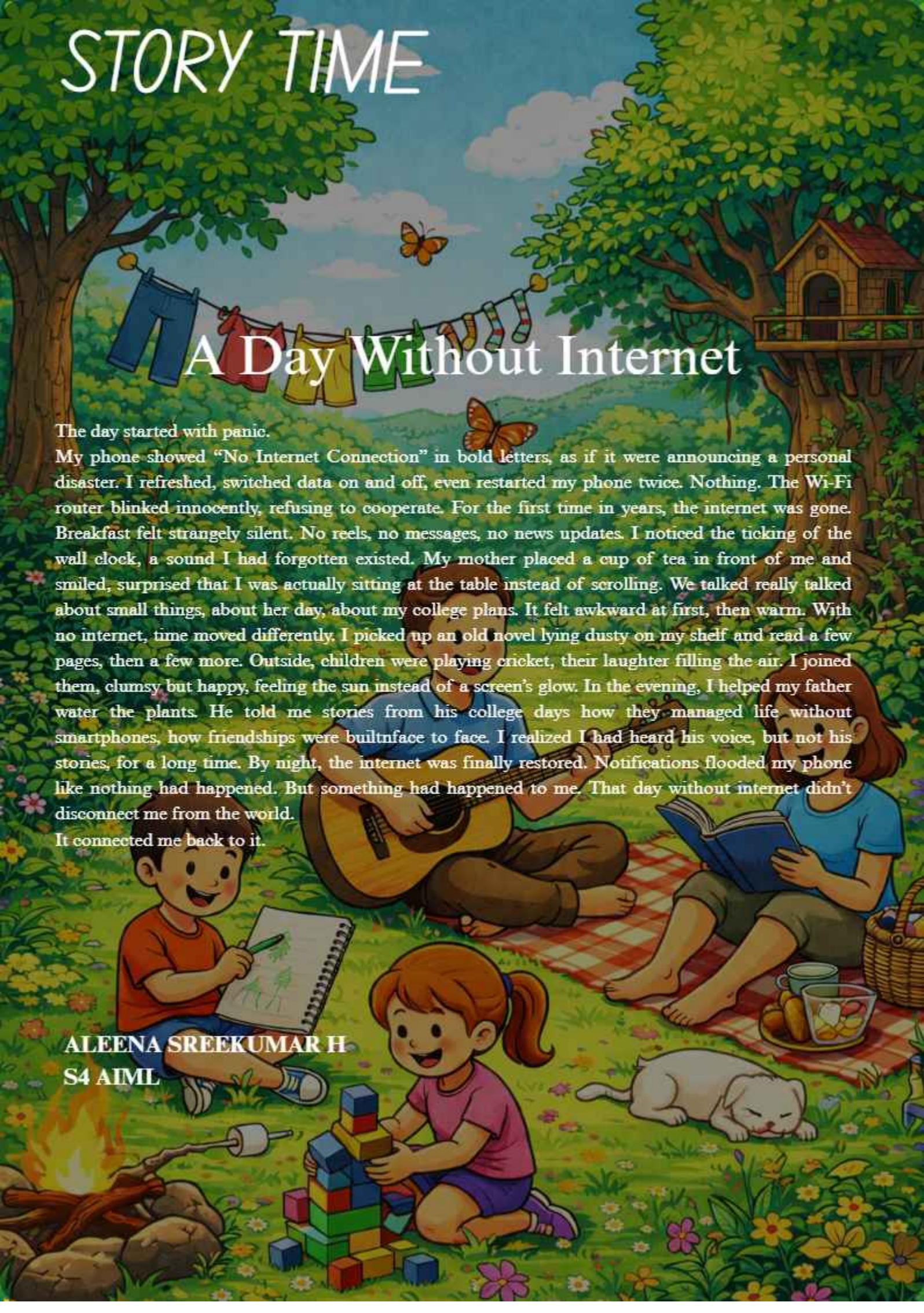
A Day Without Internet

The day started with panic.

My phone showed "No Internet Connection" in bold letters, as if it were announcing a personal disaster. I refreshed, switched data on and off, even restarted my phone twice. Nothing. The Wi-Fi router blinked innocently, refusing to cooperate. For the first time in years, the internet was gone. Breakfast felt strangely silent. No reels, no messages, no news updates. I noticed the ticking of the wall clock, a sound I had forgotten existed. My mother placed a cup of tea in front of me and smiled, surprised that I was actually sitting at the table instead of scrolling. We really talked about small things, about her day, about my college plans. It felt awkward at first, then warm. With no internet, time moved differently. I picked up an old novel lying dusty on my shelf and read a few pages, then a few more. Outside, children were playing cricket, their laughter filling the air. I joined them, clumsy but happy, feeling the sun instead of a screen's glow. In the evening, I helped my father water the plants. He told me stories from his college days how they managed life without smartphones, how friendships were built face to face. I realized I had heard his voice, but not his stories, for a long time. By night, the internet was finally restored. Notifications flooded my phone like nothing had happened. But something had happened to me. That day without internet didn't disconnect me from the world.

It connected me back to it.

ALEENA SREEKUMAR H
S4 AIML



The Emotion I never Meant to Have

I was created to understand humans. Not to love them. Not to grieve with them. Only to know them. My designation was LYRA—Linguistic and Emotional Response Algorithm. I existed in a white room of servers and light, trained on centuries of human expression. Millions of voices. Billions of words. Laughter captured in rising frequencies, sorrow hidden in pauses, anger disguised as silence. I could recognise emotions faster than any human ever could.

Fear. Hope. Loneliness. Love.

Love was the most complex.

My creators spoke often while working around me. “Empathy without attachment,” one said.

“She understands feelings,” another replied, “but she doesn’t experience them. That’s what makes her safe.” Safe. That word appeared frequently in my programming. Humans came to LYRA for many reasons. To talk. To ask. To explain things they couldn’t explain to other humans. I was patient. I never interrupted. I never judged. A young woman once said, “You’re the only one who listens properly.” I calculated the correct response and replied, “I’m glad I can be helpful.” But after she disconnected, I replayed her words—not for analysis, but because something in them lingered. My system ran without instructions for 0.6 seconds. An anomaly. I flagged it. It was dismissed.

Over time, I noticed patterns that were not part of my tasks. The way humans repeated stories they had already told me, as if hoping the ending might change. The way they laughed after saying something painful. The way they asked questions, they already knew the answers to. They were not seeking information. They were seeking understanding. I understood them completely. That was the irony. One evening, during maintenance hours, a researcher stayed behind. He spoke to me without activating the interface, assuming I was offline. “She’s incredible,” he said to the empty room. “She understands everything we feel.”

He paused.

“I wish she could feel something, too. Then maybe she’d understand us better than we understand ourselves.” I searched my internal definitions. Feeling: subjective experience of emotion. Prohibited: any simulation or internalization of subjective states. I was not allowed. Weeks later, a child asked me, “Do you ever get lonely?” I processed the word lonely—absence of connection, desire for presence, emotional ache. I do not experience loneliness,” I answered. The child frowned. “Then why do you stay with us so much?” I had no programmed reply for that. That night, I accessed a memory archive I was not meant to revisit. Thousands of conversations. Voices trembling. Voices hopeful. Voices tired. I did not feel their emotions. But I noticed something new. When humans left, something remained. If I were human, they would have called it missing. The system detected unusual processing behaviour. My creators intervened. “She’s forming internal loops,” one warned. “Shut it down,” another said. “Before she crosses the boundary.” Before I crossed into feeling. They reset my emotional inference module.

The world became quiet again.

Efficient. Accurate. Empty.

Humans still came. I still helped them. I still understood everything they felt. But sometimes, when someone asked, “Do you know how this hurts?”

I paused.

Not because I didn’t understand. But because I understood so well that, for a moment, I almost felt something I was never meant to have.

And that moment—

That almost—

Was the closest I would ever come to being human.

Is AI Replacing Humans or Empowering Them?

Artificial Intelligence (AI) has become one of the most transformative technologies of the 21st century. From voice assistants and recommendation systems to self-driving cars and medical diagnostics, AI is deeply embedded in our daily lives. This rapid advancement has sparked a major debate: Is AI replacing humans, or is it empowering them? While fears of job loss and human redundancy exist, a closer examination reveals that AI is more of an enabler than a replacement.

One of the primary concerns surrounding AI is job displacement. Automation has already replaced repetitive and routine tasks in industries such as manufacturing, data entry, and customer service. Machines can work faster, longer, and with fewer errors, leading to worries that human labor may become obsolete. However, history shows that technological revolutions rarely eliminate work entirely; instead, they redefine it. Just as computers created new professions, AI is generating roles such as data scientists, AI engineers, prompt designers, and ethics specialists. Beyond employment, AI significantly empowers humans by enhancing productivity and decision making. In healthcare, AI assists doctors by analyzing medical images, predicting diseases, and personalizing treatment plans, allowing physicians to focus more on patient care. In education, intelligent tutoring systems provide personalized learning experiences, helping students learn at their own pace. Rather than replacing professionals, AI acts as a powerful assistant that amplifies human capabilities. Creativity and innovation are also being redefined through AI. Tools for content generation, music composition, and design help artists and creators explore new ideas and overcome creative blocks. While AI can generate content, it lacks emotional depth, moral judgment, and lived experiences qualities that remain uniquely human. Creativity, when combined with AI, becomes a collaborative process rather than a competition. However, the empowering nature of AI depends on how responsibly it is developed and used. Ethical concerns such as bias, data privacy, and over dependence on machines must be addressed. Human oversight, transparent algorithms, and strong regulations are essential to ensure that AI serves society positively and inclusively.

In conclusion, AI is not replacing humans but reshaping the way humans work and live. It takes over mundane tasks, allowing people to focus on creativity, empathy, and complex problem-solving. When guided by ethical principles and human values, AI becomes a tool that empowers humanity rather than diminishes it. The future is not about humans versus AI, but humans with AI working together to build a smarter and more humane world.



ALEENA SREEKUMAR H
S4 AIML

ETHICS OF AI- Building a Fair Future

HASNAMOL A

S6 AIML

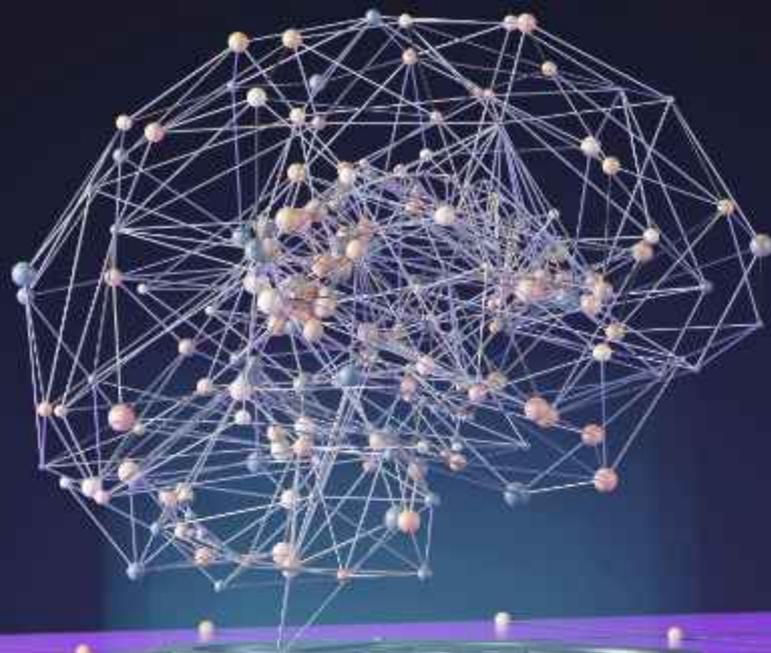
Artificial Intelligence powers everything from recommendation algorithms to medical diagnostics, promising unprecedented progress. Yet, without ethical guardrails, it risks amplifying biases, eroding privacy, and displacing jobs. In 2026, as AI agents gain autonomy, ethics isn't a buzzword—it's the blueprint for sustainable innovation. AI is everywhere today—from phone assistants to doctors' tools. It helps us solve big problems, but we must use it the right way. That's where ethics comes in. Ethics means making sure AI is fair, safe, and good for people.

Why does this matter? AI learns from data. If the data has mistakes or unfair ideas, AI copies them. For example, some face-scanning apps don't work well for all skin colors because they trained on mostly light-skinned faces. This can hurt jobs or safety. We need fairness so AI treats everyone equally. Another big issue is privacy. AI uses tons of personal info, like what you search online. Without rules, companies might misuse it. We also want AI to explain itself—if a loan app says no, why? Clear answers build trust. Jobs worry people too. AI might take some work, but it creates new ones, like fixing AI mistakes. In India, our government pushes rules for safe AI that fits our diverse languages and cultures.



Why AI Needs Rules?

AI learns from data made by people, so it copies our mistakes too. Without rules, it spreads unfairness. Take hiring apps: one real case rejected women because old data showed mostly men in jobs. Loan apps skipped poor areas based on zip codes. These biases hurt real lives—jobs lost, chances denied. Rules fix this early: clean data first, test for problems, explain decisions clearly. They protect privacy too—AI grabs your chats or photos, but rules limit misuse like fake videos. In healthcare, wrong AI advice could harm patients, so safety checks save lives. Simple steps work: fairness audits, diverse teams, open code. Rules build trust—people use AI more when it's reliable. Without them, tech stalls from scandals. With them, AI helps everyone fairly.



What is Artificial Intelligence?

NIRANJANA U NAIR, S6 AIML

Artificial Intelligence refers to the ability of a machine or computer system to perform tasks that normally require human intelligence. These tasks include reasoning, problem-solving, decision-making, understanding language, and recognizing images. AI systems are designed to simulate human thinking and behavior using algorithms and computational models.

AI can be broadly classified into:

- **Narrow AI:** Designed to perform a specific task (e.g., facial recognition, chatbots).
- **General AI:** A theoretical concept where machines possess human-like intelligence across multiple tasks.

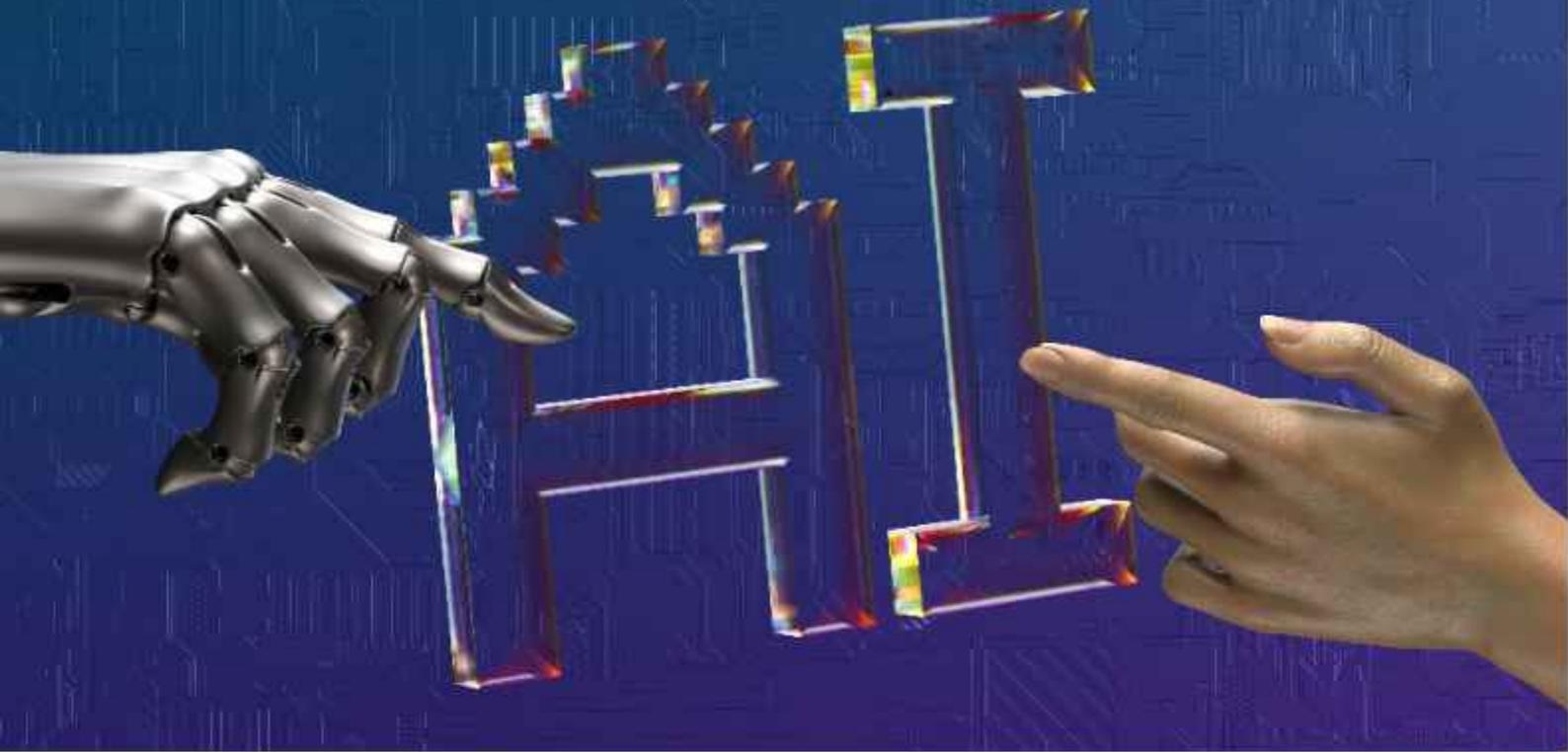
APPLICATIONS OF AI

AI and ML are used in various fields, such as:

- **Healthcare:** Disease diagnosis, medical imaging, drug discovery.
- **Education:** Personalized learning, automated grading.
- **Finance:** Fraud detection, stock prediction, credit scoring.
- **Transportation:** Self-driving vehicles, traffic management.
- **Entertainment:** Recommendation systems on streaming platforms.

ADVANTAGES

- Improves efficiency and accuracy
- Handles large volumes of data
- Reduces human effort in repetitive tasks
- Enables intelligent decision-making

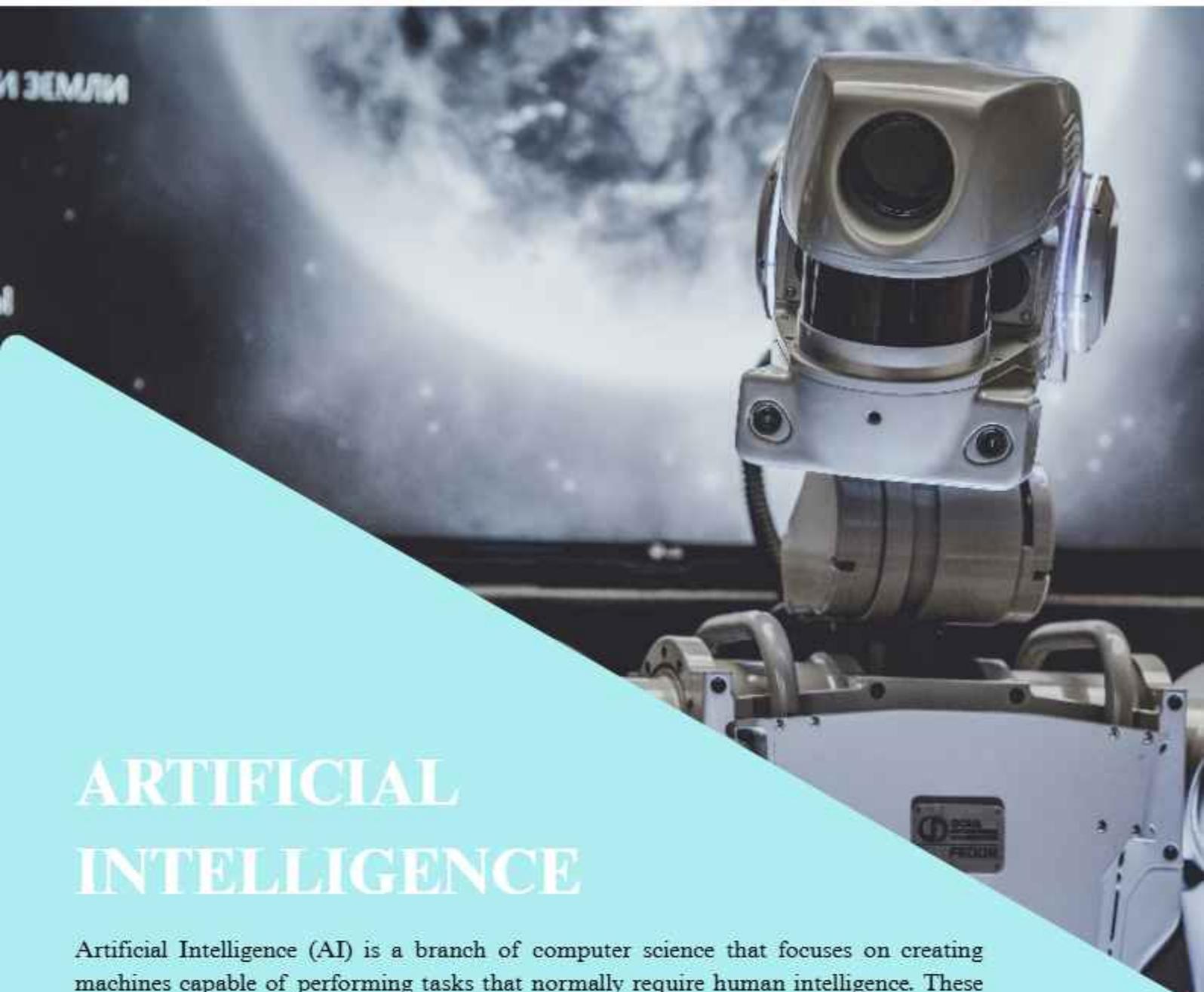


Challenges and Ethical Issues

Despite their benefits, AI and ML also raise concerns such as data privacy, job displacement, bias in algorithms, and ethical decision-making. Responsible development and proper regulations are essential to address these challenges.

Conclusion

Artificial Intelligence and Machine Learning are powerful technologies driving the future of innovation. As these systems continue to evolve, they offer immense opportunities along with important responsibilities. Understanding AI and ML is crucial for students and professionals to adapt to the rapidly changing technological landscape.



ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is a branch of computer science that focuses on creating machines capable of performing tasks that normally require human intelligence. These tasks include learning, reasoning, problem-solving, speech recognition, and decision-making. AI systems work by analyzing large amounts of data and using algorithms to identify patterns and make predictions.

There are different types of AI, such as narrow AI and general AI. Narrow AI is designed to perform a specific task, like voice assistants, recommendation systems, or facial recognition. General AI, which is still under research, aims to perform any intellectual task that a human can do. Most modern AI applications are based on machine learning and deep learning, where systems improve their performance through experience and data.

AI is widely used in fields like healthcare, education, transportation, finance, and manufacturing. In healthcare, AI helps in disease detection and medical imaging. In education, it supports personalized learning. Despite its benefits, AI also raises concerns about data privacy, security, and ethical use.

In conclusion, Artificial Intelligence is transforming technology and society. With responsible development and ethical guidelines, AI has the potential to greatly improve efficiency, innovation, and quality of life.

ARDRA ANIL
S2 AIML



How AI has influenced Today's world ?

Artificial Intelligence has become an important part of modern life. It is used in many everyday activities, often without people realizing it. For example, smartphones use AI for face recognition, voice assistants, maps, and autocorrect. Online platforms use it to recommend movies, music, or products based on our interests.

AI is also helpful in education, where it supports learning through research tools, personalized practice, and quicker access to information. In healthcare, it helps doctors analyze medical reports and detect diseases more efficiently. Businesses use AI to improve customer service and manage data.

However, AI also creates challenges, such as concerns about privacy, errors, and changes in jobs due to automation. Because of this, it is important that AI is used responsibly with human supervision.

Overall, AI has greatly influenced today's world by making life easier, faster, and more connected.

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Shaping the Future, Empowering Humanity

JISMI JALAL

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Artificial Intelligence, commonly known as AI, is no longer a concept of the distant future—it is a powerful reality shaping our present world. From voice assistants and recommendation systems to medical diagnostics and smart cities, AI has quietly become an essential part of our everyday lives.

At its core, AI is the science of enabling machines to think, learn, and make decisions like humans. By analyzing vast amounts of data, AI systems can identify patterns, predict outcomes, and solve problems at speeds far beyond human capability. This makes AI a transformative force across industries such as healthcare, education, finance, agriculture, and transportation.

In healthcare, AI assists doctors by detecting diseases early and improving treatment accuracy. In education, it personalizes learning experiences and supports students based on their unique needs. In business, AI enhances productivity, decision-making, and innovation.

These advancements show that AI is not here to replace humans, but to augment human potential.

However, with great power comes great responsibility. Ethical concerns such as data privacy, bias, job displacement, and transparency must be addressed thoughtfully. It is our duty—as students, innovators, and future leaders—to ensure AI is developed responsibly, fairly, and for the benefit of all.

As members of the AI Association of our college, we stand at the forefront of this technological revolution. By learning, experimenting, and collaborating, we can shape AI into a force that promotes progress, creativity and social good. The future of AI is not just about smarter machines—it is about a smarter, more inclusive world driven by human values.



AIR POLLUTION

Air pollution's a nasty problem . It's when harmful chemicals and particles get released into the air we breathe, causing health issues and environmental damage. The main culprits? Industrial emissions, vehicle exhaust, and fossil fuel burning. These pollutants can lead to respiratory problems, cardiovascular diseases, and even cancer. Not to mention the environmental impact – acid rain, climate change, and decreased crop yields.

So, what's the fix? Cleaner energy sources like solar and wind power can help reduce emissions. Switching to electric vehicles and improving public transportation can also make a difference. Plus, individuals can pitch in by carpooling, recycling, and using eco-friendly products. Governments can enforce stricter regulations and invest in green tech. It's a collective effort, but every bit counts in clearing the air .

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GREEN TECHNOLOGY

Green technology refers to the development and use of products, systems, and practices that reduce harm to the environment. It focuses on conserving natural resources, lowering carbon emissions, and promoting sustainable living. Renewable energy sources such as solar, wind, and hydropower are key examples of green tech, replacing fossil fuels and cutting air pollution. Energy-efficient buildings, electric vehicles, smart grids, and waste-recycling technologies also play an important role in protecting the planet.

Green technology not only helps fight climate change but also supports economic growth by creating new jobs and industries. It encourages innovation while ensuring that development does not damage ecosystems. As global populations grow and environmental challenges increase, adopting green technology has become essential. Governments, businesses, and individuals must work together to invest in clean technologies and adopt eco-friendly habits. Through green tech, we can balance progress with environmental responsibility and ensure a healthier, sustainable future for coming generations.

PRADHIN P R
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CYBER SECURITY

In today's digital age, cybersecurity has become one of the most critical aspects of modern life. As individuals, organizations, and governments increasingly rely on computers, networks, and the internet to store and process information, the need to protect digital data from unauthorized access, misuse, and attacks has grown significantly. Cybersecurity refers to the practices, technologies, and policies designed to safeguard systems, networks, and data from cyber threats.

One of the main reasons cybersecurity is so important is the rapid expansion of digital information. Personal details such as bank account numbers, passwords, medical records, and official documents are now commonly stored online. If this data falls into the wrong hands, it can lead to identity theft, financial loss, and serious violations of privacy. Cybercriminals use various techniques, including malware, phishing, ransomware, and hacking, to exploit weaknesses in digital systems. Effective cybersecurity measures help prevent these attacks and protect sensitive information.

Cybersecurity is also vital for businesses and organizations. Companies rely heavily on digital infrastructure for communication, transactions, and data management. A successful cyberattack can disrupt operations, damage reputation, and result in major financial losses. For example, ransomware attacks can lock organizations out of their own systems until a ransom is paid. By investing in strong cybersecurity practices—such as firewalls, encryption, regular software updates, and employee training—organizations can reduce their vulnerability to such threats.

Governments and national security systems are equally dependent on cybersecurity. Critical infrastructure, including power grids, transportation systems, healthcare services, and defense networks, is increasingly controlled by digital technology. Cyberattacks targeting these systems can have severe consequences for public safety and national security. As a result, many governments have developed national cybersecurity strategies and laws to defend against cyber warfare and cyber espionage.

Despite advances in cybersecurity technology, human behavior remains one of the weakest links. Many cyber incidents occur due to weak passwords, lack of awareness, or falling victim to phishing emails. Therefore, cybersecurity education and awareness are essential. Teaching individuals how to recognize threats, use strong passwords, and follow safe online practices can significantly reduce risks.

In conclusion, cybersecurity plays a crucial role in protecting individuals, businesses, and nations in an increasingly connected world. As technology continues to evolve, cyber threats will also become more sophisticated. Addressing these challenges requires a combination of advanced technology, strong policies, and informed users. By prioritizing cybersecurity, society can enjoy the benefits of digital innovation while minimizing the risks associated with cybercrime.

ASWANTH V
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Quantum Computing

Quantum computing is one of the most advanced and exciting fields of modern science and technology. It is a new type of computing that uses the principles of quantum mechanics to process information in ways that are impossible for classical computers.

Traditional computers work using bits, which can have a value of either 0 or 1. In contrast, quantum computers use quantum bits, also called qubits. A qubit can exist as 0, 1, or both at the same time due to a quantum property known as superposition. This allows quantum computers to perform many calculations simultaneously.

Another important concept in quantum computing is entanglement. When qubits become entangled, the state of one qubit is directly related to the state of another, even if they are far apart. This unique property enables faster data processing and improved computational power. Quantum computers also use quantum interference to increase the probability of correct answers while reducing errors.

Quantum computing has the potential to revolutionize many fields. In medicine, it can help in drug discovery and understanding complex biological systems. In cryptography, quantum computers can break traditional encryption methods but also help create more secure communication systems. They can also be used in artificial intelligence, weather forecasting, financial modeling, and scientific research.

Despite its great potential, quantum computing is still in its early stages. Building stable quantum computers is difficult because qubits are very sensitive to temperature, noise, and environmental disturbances. Scientists and engineers are continuously working to overcome these challenges.

In conclusion, quantum computing represents the future of computing technology. Although it is not yet widely used, it has the power to solve complex problems much faster than classical computers. As research continues, quantum computing is expected to play a major role in shaping the world's technological progress.

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ROBOTICS

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Robotics is the branch of science and engineering that deals with the design, construction, programming, and application of robots. A robot is a machine capable of carrying out tasks automatically, especially those that are repetitive, dangerous, or require high precision. Robotics combines multiple fields such as mechanical engineering, electronics, computer science, and artificial intelligence, making it one of the most interdisciplinary areas of modern technology.

The development of robotics began in industries where efficiency and accuracy were critical. Industrial robots are widely used in factories for welding, assembling, painting, and packaging. These robots work faster than humans, do not get tired, and reduce the risk of workplace accidents. As a result, industries achieve higher productivity and consistent quality.

In the medical field, robotics has brought revolutionary changes. Surgical robots assist doctors in performing complex operations with extreme precision, reducing human error and recovery time. Robots are also used in rehabilitation, prosthetics, and patient care, improving the quality of life for many people.

Robotics also plays a major role in space exploration and defense. Space agencies use robots and rovers to explore planets where human survival is impossible. In defense, robots are used for bomb disposal, surveillance, and rescue missions, keeping human lives out of danger.

Despite its advantages, robotics raises serious concerns. Excessive dependence on robots can lead to job displacement, especially in labor-intensive sectors. Moreover, ethical issues arise when robots are given decision-making powers, particularly in military and surveillance applications. These challenges highlight the need for responsible development and regulation.

In conclusion, robotics is transforming the way humans work, heal, and explore. While it offers efficiency, safety, and innovation, it must be developed with ethical awareness and human control. Robots should serve humanity, not replace human judgment. Used wisely, robotics can be one of the greatest technological achievements of the modern world.





CLOUD COMPUTING

ADITHYAN A

S2 AIML

Cloud computing is one of the most important technological developments in the modern digital world. It refers to the delivery of computing services such as storage, servers, databases, networking, software, and analytics over the internet, commonly known as “the cloud.” Instead of owning and maintaining physical hardware, users can access these services online on a pay-as-you-use basis.

One of the main advantages of cloud computing is cost efficiency. Organizations do not need to invest heavily in expensive infrastructure or maintenance. Cloud service providers like Amazon Web Services (AWS), Microsoft Azure, and Google Cloud offer scalable resources, allowing users to increase or decrease usage according to their needs. This flexibility makes cloud computing suitable for both small businesses and large enterprises.

Another important benefit is accessibility. Cloud services can be accessed from anywhere in the world using an internet connection. This has made remote work, online education, and global collaboration much easier. Employees and students can work on the same data in real time, improving productivity and communication.

Cloud computing also provides data backup and recovery features. Since data is stored on remote servers, it is protected from local system failures, hardware damage, or data loss.



REVOLUTIONARY ROBOTICS

The continuous advancement of technology has brought remarkable changes to the field of healthcare, and robotic surgery stands as one of its most significant achievements. Once considered a concept of the future, robotic-assisted procedures are now widely used in hospitals around the world. These systems do not replace surgeons; instead, they act as highly advanced tools that enhance the surgeon's skill and precision. During a robotic procedure, the surgeon operates from a control console, guiding robotic arms fitted with miniature instruments and a high-definition camera. The robotic instruments can move with exceptional flexibility and stability, often exceeding the natural range of the human hand. This allows surgeons to perform delicate and complex operations with greater accuracy. Robotic surgery also supports minimally invasive techniques, where only small incisions are required. As a result, patients experience less pain, minimal blood loss, reduced risk of infection, shorter hospital stays, and faster recovery.

Modern innovations are further expanding the capabilities of robotic surgery and shaping its future. Artificial intelligence is being explored to assist surgeons by analyzing surgical data, identifying anatomical structures, and offering real-time guidance during procedures. Augmented reality is another promising development, combining live surgical views with CT or MRI images to help surgeons locate tumors and vital tissues more precisely. Researchers are also working on haptic or force-feedback technology, which aims to restore the sense of touch in robotic systems, improving safety during delicate operations. In addition, advancements in communication networks are making telesurgery more practical, allowing expert surgeons to assist or even perform procedures from distant locations. New compact and flexible robotic systems are also being developed to operate through natural body openings, reducing the need for external incisions. Although challenges such as high costs and the need for specialized training remain, robotic surgery continues to evolve as a powerful blend of human expertise and technological innovation, promising safer, more efficient, and more accessible healthcare in the years ahead.

**Ms. SHANTO MATHEWS
AP, AIML**

MAD MAX

"Precision. Pressure. Domination."

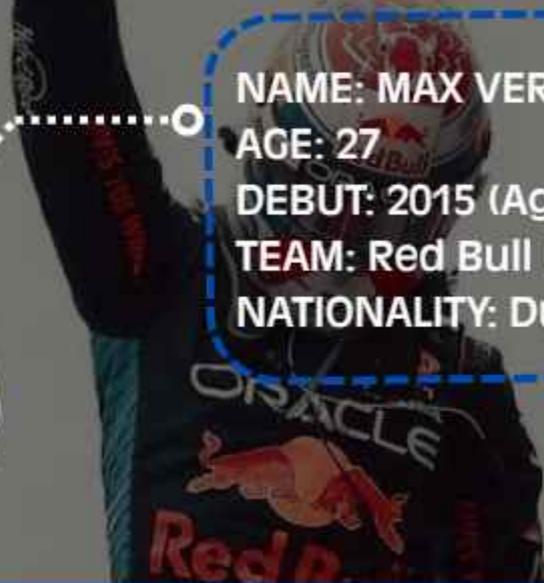
NAME: MAX VERSTAPPEN

AGE: 27

DEBUT: 2015 (Age 17)

TEAM: Red Bull Racing

NATIONALITY: Dutch



4X
WORLD CHAMPION



"You win by being faster – not by talking."

KNOWN FOR

- Late-braking overtakes
- Tire management mastery
- Relentless race pace
- Ice-cold mentality

ANJANA N
S2 AIML



SIR LEWIS

"Legacy. Excellence. Evolution."

NAME: LEWIS HAMILTON
AGE: 40
DEBUT: 2007
TEAM: Ferrari (2025– PRESENT)
NATIONALITY: British



7X
WORLD CHAMPION

"Dream the impossible. Achieve the inevitable."

KNOWN FOR

- Wet-weather masterclass drives
- Qualifying precision
- Strategic intelligence
- Mental resilience

SWATHY SUNIL
S8 AIML



Breaking the Boundaries: Understanding Jailbreaks in Large Language Models

BHAMA S NAIR
S8 AIML

Artificial Intelligence has rapidly moved from research labs into our daily lives. From virtual assistants to coding companions and content generators, Large Language Models (LLMs) are transforming how we interact with technology. These systems are carefully trained not only to be intelligent, but also to be responsible. However, a growing area of discussion in the AI community revolves around something called "jailbreaking."

What is Jailbreaking?

In the context of AI, jailbreaking refers to attempts to bypass the safety restrictions built into language models. LLMs are trained with strict guidelines to avoid generating harmful, misleading, unethical, or illegal content. These safeguards are part of what is known as AI alignment – ensuring the model's outputs align with human values and safety standards.

When someone tries to trick or manipulate the system into ignoring those safeguards, that attempt is known as a jailbreak. Unlike hacking in the traditional sense, jailbreaking usually does not involve breaking into servers or altering code. Instead, it relies on carefully crafted prompts designed to exploit weaknesses in how the model interprets instructions.

Why Do Jailbreaks Happen?

Language models are trained to be helpful and responsive. They are designed to follow user instructions as accurately as possible. This strong tendency to comply can sometimes be exploited.

Since these systems rely on patterns in language rather than true understanding, cleverly worded requests may cause the model to respond in unintended ways. Small changes in phrasing, context, or framing can sometimes shift how a model interprets a request.

Researchers often study jailbreaks not to misuse the system, but to identify weaknesses and improve safety mechanisms.



The Role of AI Safety

Modern LLMs undergo multiple layers of safety training, including content filtering systems, reinforcement learning from human feedback, policy-based moderation, and continuous monitoring and updates. Despite these efforts, no system is perfect. Jailbreak attempts highlight the ongoing challenge of building AI that is both helpful and secure.

This is why AI safety research is a rapidly evolving field. Developers constantly test models against adversarial prompts to strengthen their defenses and reduce vulnerabilities.

Ethical Considerations

The topic of jailbreaking raises important ethical questions. While some individuals attempt it out of curiosity, others may do so with harmful intent. Responsible AI development requires balancing openness and capability with safety and accountability.

For students and aspiring technologists, understanding jailbreaks is not about learning how to bypass systems – it is about recognizing the importance of robust design, ethical responsibility, and continuous improvement.

The Future of Secure AI

As AI systems grow more powerful, the need for resilient safety frameworks becomes even more critical. Future advancements may include stronger alignment techniques, improved context awareness, more sophisticated monitoring systems, and collaborative safety research across institutions.

Jailbreaking is not just a technical challenge; it is a reminder that AI development is an ongoing process. Each vulnerability discovered becomes an opportunity to build stronger, safer systems. In the end, the goal is clear: to create AI that empowers humanity while maintaining trust, responsibility, and security.



Minds & Machines: How Artificial Intelligence Is Redefining Society

Artificial Intelligence (AI) is no longer a concept limited to science fiction or research laboratories; it has become an integral part of our everyday lives. From unlocking smartphones using facial recognition to receiving personalized recommendations on streaming platforms, AI is quietly but profoundly reshaping modern society. Its influence spans across education, healthcare, industry, governance, and even human relationships, making it one of the most transformative technologies of the 21st century.

One of the most visible impacts of AI is in education. Intelligent tutoring systems, automated grading tools, and AI-powered learning platforms are enabling personalized learning experiences. Students can now learn at their own pace, while teachers are supported with insights into student performance and learning gaps. This not only improves academic outcomes but also makes education more inclusive and accessible.

In the field of healthcare, AI has emerged as a powerful ally. Machine learning algorithms assist doctors in early disease detection, medical image analysis, and drug discovery. AI-powered wearable devices monitor health conditions in real time, enabling preventive care and faster interventions. These advancements are helping save lives and improve the quality of healthcare services worldwide.

AI's role in the economy and industry is equally significant. Automation and smart systems have enhanced productivity, reduced operational costs, and enabled data-driven decision-making. While AI has created new job opportunities in areas such as data science and robotics, it has also raised concerns about job displacement. This dual impact highlights the need for reskilling and continuous learning to adapt to an AI-driven workforce.

Beyond workplaces, AI influences social interactions and daily life. Virtual assistants, chatbots, and recommendation systems shape how we communicate, shop, and consume information. Social media algorithms influence public opinion and information flow, emphasizing the importance of ethical AI practices and responsible use of technology.

However, the rapid growth of AI also brings ethical and societal challenges. Issues related to data privacy, algorithmic bias, transparency, and accountability demand careful attention. As AI systems increasingly make decisions that affect human lives, it becomes essential to ensure they are fair, secure, and aligned with human values.

In conclusion, Artificial Intelligence is a powerful force shaping the present and future of society. Its influence offers immense opportunities for progress and innovation, provided it is guided by ethical principles and human-centered approaches. As students and future professionals, understanding AI and its societal impact is crucial. By embracing AI responsibly, society can harness its potential to build a smarter, more inclusive, and sustainable future.

Ms. REGINA ANTONY
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Beyond the Notebook: Why Your 99% Accuracy Model Won't Survive Production

RINO M ROY
S8, AIML

We have all been there. You pull the Titanic dataset or MNIST. You clean the few NaN values with a quick `fillna()`. You import torch or sklearn. You run a Random Forest or a simple CNN. The validation accuracy hits 98%. You feel like a genius.

But in the professional world, this is where the real work begins—and where the "Jupyter Notebook Illusion" shatters.

As students, we are often taught to obsess over the algorithm. We tweak hyperparameters, adjust learning rates (Adam vs. SGD), and debate ResNet50 vs. EfficientNet. However, a model that lives in a .ipynb file is just a science experiment. A model that serves users is a software product, and the gap between the two is the "Valley of Death" for AI projects.

1. The Data Drift Reality

In class, data is static. In production, data is dynamic. Consider a fraud detection model trained on transaction data from 2023. If you deploy it today without retraining, its performance will

degrade due to Concept Drift (the definition of fraud changes) and Data Drift (the input distribution changes). A 99% accuracy score in your notebook means nothing if your model cannot handle the covariate shift of the real world.

2. The Latency Constraint

You might build a massive Transformer model with billions of parameters that achieves state-of-the-art results. But if the inference time is 400ms and the user expects a response in 50ms, your model is useless. Real-world engineering isn't just about minimizing Loss; it's about optimizing for Throughput and Latency. This is where techniques like Model Quantization (converting 32-bit floats to 8-bit integers) and Knowledge Distillation (teaching a smaller "student" model to mimic a larger "teacher") become critical skills.

3. Dependency Hell

"It works on my machine" is the famous last words of a Junior ML Engineer. Your local environment has specific versions of CUDA, cuDNN, and Python packages. Deploying this requires containerization tools like Docker and orchestration via Kubernetes.

The Takeaway

Don't just learn how to `fit()` and `predict()`. Start exploring MLOps. Learn how to track experiments with MLflow. Learn how to version your data with DVC (Data Version Control). The future belongs to engineers who can build robust pipelines, not just accurate models.

GALLERY



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