SHRI SHANKARACHARYA INSTITUTE OF PROFESSIONAL MANAGEMENT AND TECHNOLOGY

CYBER *TRINITY*

PRESENTS

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SSIPMT
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CYBERTRINITY

NEWSLETTER

Department of Computer Science & Engineering

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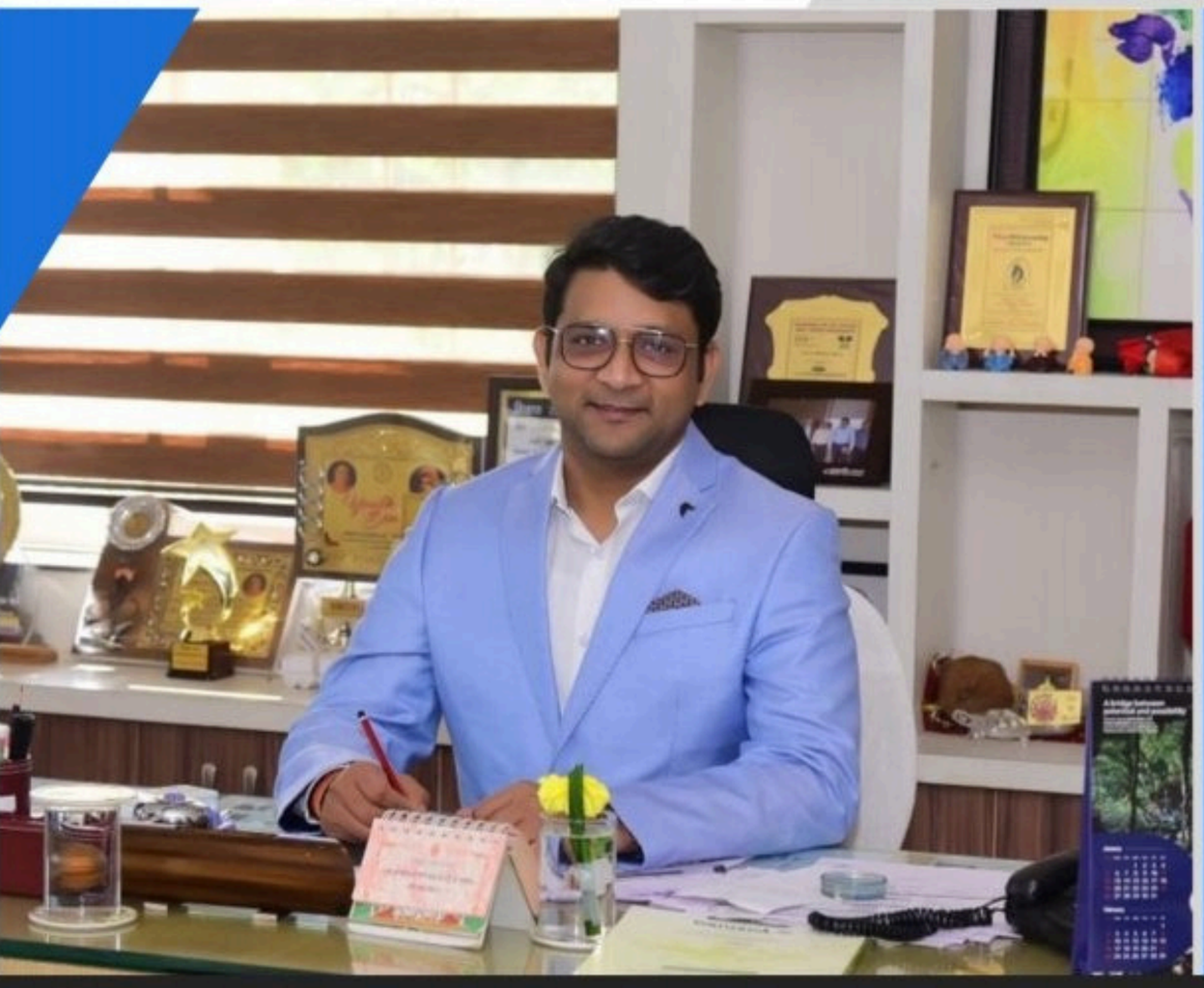
Vision

"To produce value-based quality Engineers with the knowledge of latest trends and research technologies to meet the developing needs of industry and society."

Mission

To impart quality education in line with quality teaching - learning process.
To provide a better environment to encourage and support innovative research and development.
To strengthen linkage between industry-academia for overall improvement of students.

MEMORANDUM



"Innovation pulses the progress. Let's develop an environment where the ecosystem of creativity thrives."
The pace of technological advancement is rapid, propelling people towards development and growth. However, amidst this progress, one crucial aspect must not be overlooked – nature. Nature, the source of life, resources, and energy, surpasses all other developments. Growth is vital, but never at nature's expense. Prioritizing sustainability ensures growth aligns with environmental well-being. Our institute has the potential to lead our engineers towards a brighter future by fostering a sustainable environment.

Shri Nishant Tripathi
Chairman, SSIPMT Raipur

"Success is not the key to happiness. Happiness is the key to success."
SSIPMT Raipur always focuses on providing quality education to our students. Our college highlights opportunities for students to engage in extracurricular activities, internships, and leadership roles that contribute to their holistic growth as individuals. We are committed to fostering a culture of excellence and innovation. SSIPMT Raipur provides a supportive learning background to nurture their personality. We also focus on preparing for the future while enjoying the present. together, we will overcome any obstacles and emerge stronger than ever.

Dr. Alok Kumar Jain
Principal, SSIPMT Raipur

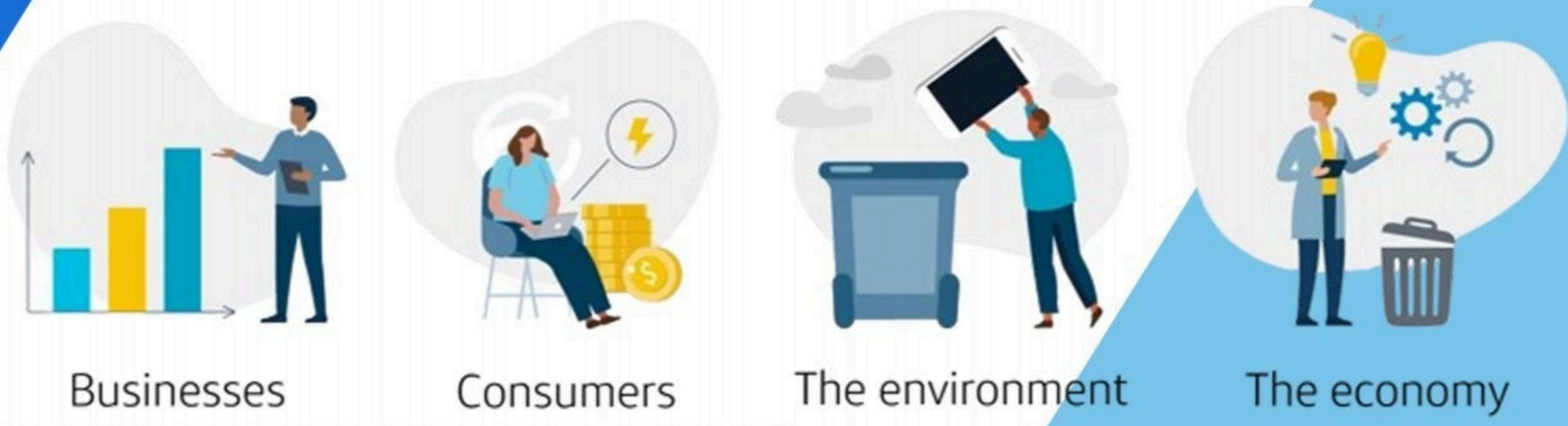
MEMORANDUM

As we explore the wonders of technology in our newsletter, I invite you to consider the marvels of innovation. In today's dynamic world, let's appreciate how manufacturers continuously enhance products, ensuring they evolve with our needs and desires. This forward-thinking approach offers us improved experiences and fosters innovation and creativity. Let's celebrate the positive strides in technological advancement, recognizing how they enrich our lives and contribute to a more sustainable future. Together, let's embrace these opportunities and inspire our community with the endless possibilities of progress.

Dr. Apurv Verma
Asst. Prof., CSE

Planned Obsolescence in technology offers an opportunity to rethink how we design and use products. By critically evaluating the lifecycle of the products we create and use, we can transition to more sustainable practices. Embracing innovation while prioritising sustainability enables the development of technologies that drive progress and benefit society and the planet in the long term. As future innovators, understanding planned obsolescence equips you to make informed decisions. Let's work together to create a future where technological advancements are both cutting-edge and environmentally responsible, fostering a more sustainable and positive impact on our world!

Mrs. Preeti Tuli
Asst. Prof.,CSE



Introduction to Planned Obsolescence in Tech

Have you ever wondered why our old devices become unusable over time, stop receiving updates, or slow down with each software update? The reason behind this is planned obsolescence. Planned obsolescence in technology refers to the practice where companies design products with a limited useful life, prompting consumers to purchase newer models more frequently. This concept was introduced in 1932 in a booklet called "Ending the Depression through Planned Obsolescence" by Bernard London and popularised by Brooks Stevens.
This strategy manipulates customers' behaviour to benefit manufacturers by making products less durable, intentionally reducing performance, or discontinuing software updates. Types of planned obsolescence are systematic, perceived, dated, and legal. Examples include Apple slowing down iPhone batteries, devices designed to be hard to repair, and some devices, like laptops and phones, using non-replaceable lithium-ion batteries that only last a couple of years. While this approach can stimulate economic growth and innovation, it raises significant ethical and environmental concerns.

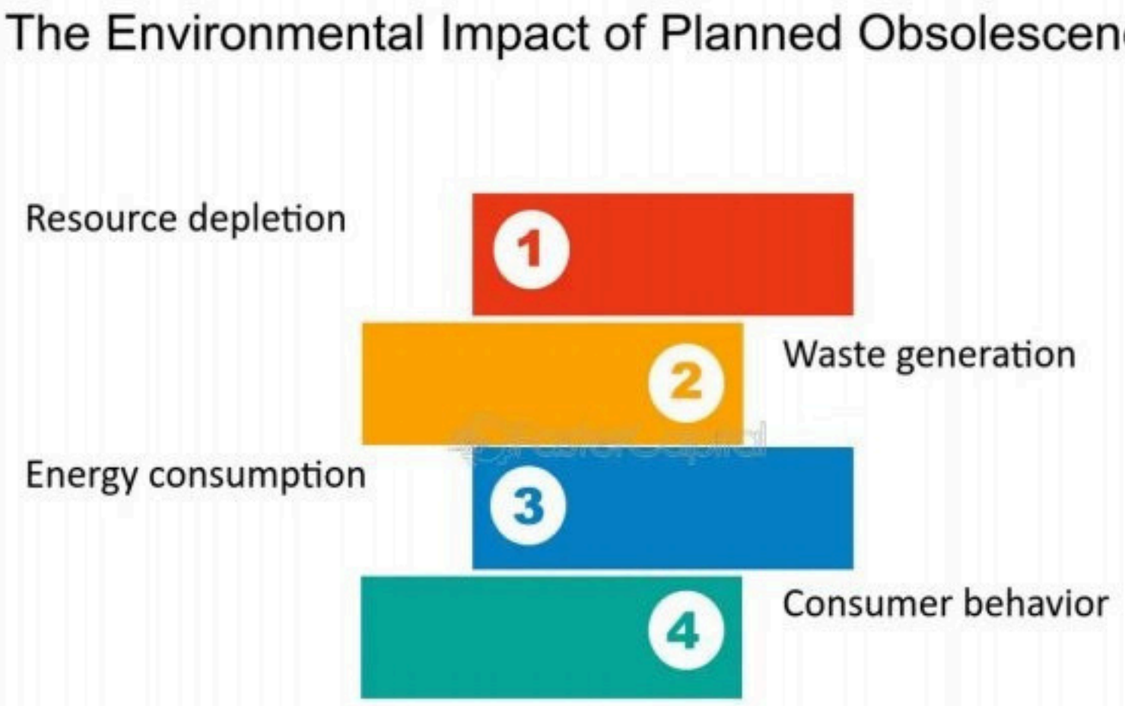
Consumer Impact

The impact of planned obsolescence on consumers is significant. Buying products intentionally designed to have a short lifespan can result in frustration, financial pressure, and a feeling of disillusionment. The constant need to replace items such as smartphones, laptops, and household appliances contributes to a culture of disposability, where durability and long-term use are sacrificed for continuous consumption. When consumers are unaware of a product's intentionally limited lifespan, their trust in brands diminishes. Advocates for ethical consumerism argue that companies should prioritize longevity and sustainability, fostering a more open and honest relationship with their customer base.

Environmental Impact

Undoubtedly, planned obsolescence significantly harms the environment. When a product becomes obsolete, it is replaced by a new one as new technologies and trends emerge. This practice decreases the reusability of resources, causing adverse effects on the environment. The manufacturing of electronics consumes vast amounts of energy and rare resources, leading to natural resource depletion. Moreover, the manufacturing processes involved in producing these gadgets render them non-decomposable and irreparable. In 2022, global electronic waste production surpassed 62 million tons, underscoring a critical environmental concern.

The Environmental Impact of Planned Obsolescence



The ongoing rise in e-waste directly contributes to escalating pollution levels. Consequently, when this waste integrates with the soil, it releases toxic chemicals and gases, posing severe environmental hazards. To safeguard our environment and control pollution, we must take steps. Therefore, sustainable development is crucial for preserving the environment and imperative for effectively addressing planned obsolescence and mitigating its adverse impacts.

Motivation

Planned obsolescence is a strategy that involves designing products to have a limited lifespan encouraging consumers to buy newer models. This approach is used in industries to boost profits.

1. **Innovation**: Implementing planned obsolescence motivates companies to continually invest in research and development efforts, driving them to enhance their products. This drive for improvement fosters technical advancements and promotes innovation within the industry.

2. **Competitive Market**: Planned obsolescence creates a competitive market environment, compelling companies to introduce improved products to attract consumers consistently. This competition often leads to the development and release of innovative and advanced offerings, providing consumers with a wider range of choices.

3. **Consumer Demands**: Many consumers seek the latest technology with improved features, and planned obsolescence meets their demand by introducing innovations.

4. **Economic Growth**: It helps in increasing economic growth by driving consumer spending on new products, which in turn generates revenue for the business and job sector.

Legal and Regulatory Landscape

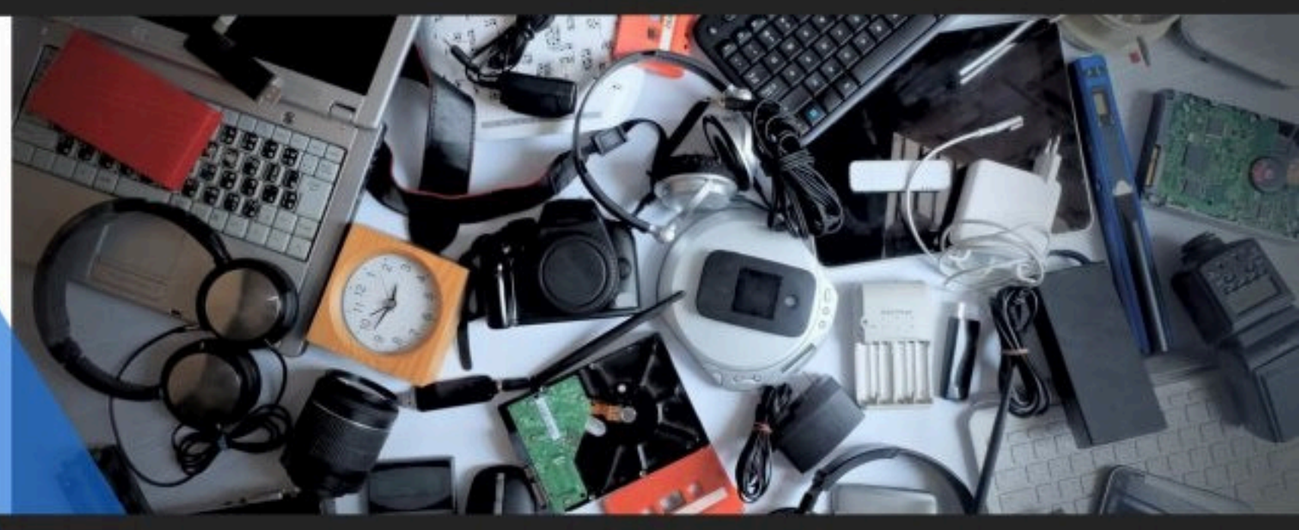
The legal and regulatory landscape of planned obsolescence is becoming prominent in the entire nation. Talking about the regulations in India that has an impact on this issue, certain laws and initiatives are taken for the same:

1. Consumer awareness initiative – Certain non-governmental and consumer groups ensure that consumers should make informed purchasing details.

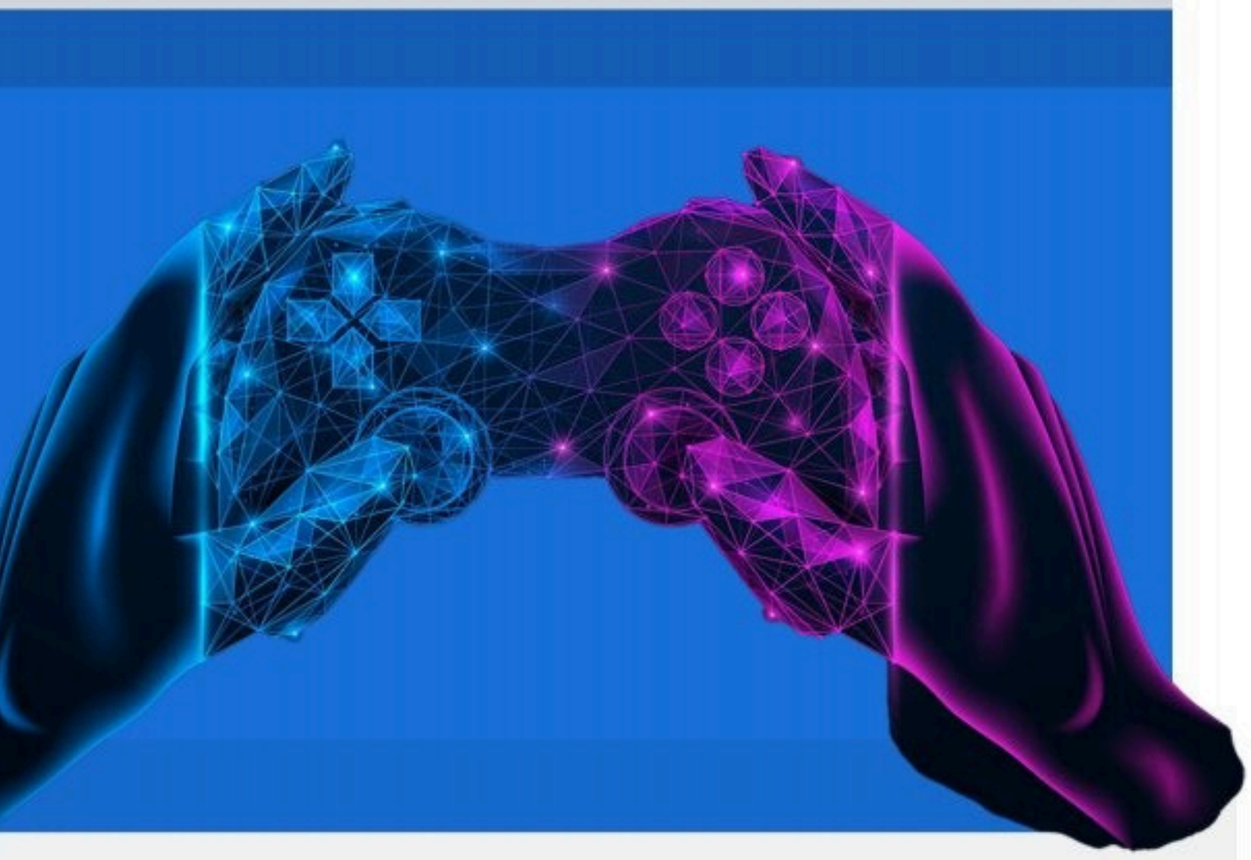
2. Environmental regulations – Manufacturers are encouraged to plan products with long lifespans and are disposable and recyclable.

3. Consumer protection act – Introduced in 2019, authorizes consumers to file a complaint if they feel that they have been affected by planned obsolescence.

Several legal actions are taken in other countries as well:
In the united states, “right to repair” movement is initiated, in which consumer can repair their own devices.
In France and Europe, they introduced laws that ensure that manufacturers disclose the details and lifespan of products and mandate longer warranty periods, improve product labeling.



TECH GEEK



AI'S GAME-CHANGING IMPACT ON THE GAMING INDUSTRY

Imagine stepping into a game where every character you encounter has a mind of its own, learning from your actions, adapting to your strategies, and evolving as you play. This isn't a distant dream—this is the reality that AI is bringing to the gaming world.

Interactive Storytelling: Remember those times when game narratives felt linear and predictable? AI is revolutionizing storytelling by creating dynamic plots that adapt based on your decisions. Game Studio, Bethesda Studios have experimented with AI in their game "The Elder Scrolls", providing a unique experience each time you play.

Smarter NPCs: Non-player characters (NPCs) are no longer the static, predictable figures they once were.

AI-driven NPCs can now exhibit complex behaviours, making them formidable allies or adversaries. Think about how enemies in games like "Middle-earth: Shadow of Mordor" remember your past encounters and adapt their strategies accordingly. How would you handle an enemy that learns from your every move?

Personalised Gaming Experience: Ever wished a game could adjust its difficulty based on your skill level?

AI algorithms can analyse your gameplay and tweak challenges to keep you engaged without feeling overwhelmed. This kind of personalized experience ensures that whether you're a newbie or a seasoned gamer, there's always a perfect level .

Procedural Content Generation: Bored of the same old game maps?

AI can generate endless variations, ensuring that every dungeon, landscape, or puzzle fresh and exciting. Games like "No Man's Sky" utilize procedural generation to create vast, unique universes to explore. Imagine never running out of new places to discover!

Enhanced Graphics and Realism: AI isn't just about gameplay; it's also transforming how games look. AI algorithms can upscale graphics in real-time, making even older games look stunningly realistic. Using AI in motion capture technology also ensures that character movements are more lifelike than ever before.

AI-Driven Content Moderation: Online multiplayer games can often suffer from toxic behaviour and cheating. AI helps create safer, more enjoyable environments by monitoring in-game interactions and detecting misconduct or unfair play. Games like "League of Legends" employ AI systems to swiftly identify and mitigate toxic behaviour, ensuring a more positive gaming community.

As AI continues to evolve, its role in the gaming industry is set to expand even further. What AI-driven advancements are you most excited to see in future games? Let your imagination run wild—after all, almost anything is possible in the world of AI and gaming.

EXTENDED REALITY

Have you ever dreamt of stepping into a digital world or bringing virtual objects into your real environment? That's the magic of extended reality (XR) – an umbrella term that encompasses virtual reality (VR), augmented reality (AR), and, Mixed reality (MR). This cutting-edge technology is revolutionizing how we interact with digital content, blurring the lines between the physical and virtual worlds.

Augmented Reality (AR) overlays digital information into the real world. Remember the Pokemon Go craze? That's AR in action! With AR apps, you can virtually place furniture in your living room before buying, visualize architectural designs on a construction site, or even bring fictional characters to life through your smartphone's camera.

Virtual Reality completely immerses the user in a fully computer-generated, simulated environment. Users wear a VR headset that replaces their entire field of view with a virtual world, blocking out the real world.

Mixed Reality (MR) takes it a step further by combining both AR & VR, allowing virtual and real-world objects to coexist and interact in real-time. With MR technology, you can interact with holographic objects as if they were physically present. For example, in a collaborative design session, team members from different locations can gather around a virtual 3D model and make real-time annotations.

Extended Reality (XR) technologies are transforming various sectors like gaming, education, aviation, design, and manufacturing. These advancements enable immersive virtual training, interactive learning experiences, and mixed-reality collaborative workspaces.

As XR continues to evolve, it unlocks vast possibilities for industries to blur the lines between the virtual and physical world, paving the way for ground breaking human-computer interactions that redefine our perception of reality.

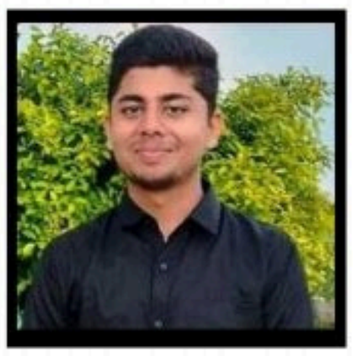
GATE QUALIFIERS - 2024

ANKUR SINHA
BATCH 2020-2024
AIR: 1196(CS)
AIR: 3864(DA)

VINIT SHARMA
BATCH 2020-2024
AIR: 7290(CS)

VISHAL RATHI
BATCH 2019-2023
AIR: 1795(CS)
AIR: 5643(EC)

PLACEMENTS AT SAP FROM 2025 BATCH



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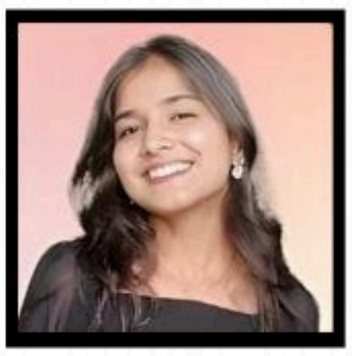


NAMAMI SINGH
CSE

AKSHAT SONI
CSE

INDEPENDENCE DAY 2024

On August 15, 2024, India celebrated its 78th Independence Day, marking the day the nation gained freedom. Every year, this day serves as a reminder of the invaluable contributions made by India's freedom fighters, who fought tirelessly to secure the rights and independence we enjoy today. This year's celebration was filled with heartfelt enthusiasm and national pride.

SSIPMT Raipur commemorated the occasion with a lamp-lighting ceremony, followed by Chairman Nishant Tripathi (BG), Principal Dr. Alok Kumar Jain, faculty members, and students paying tribute to Bharat Mata and Mahatma Gandhi before hoisting the national flag.

The event continued with a speech by Principal Dr. Alok Jain, who reflected on India's struggle for independence and the significant progress in women's empowerment since then. He highlighted the strides made in ensuring equal rights, opportunities, and respect for women in society. Chairman Nishant Tripathi then spoke about SSIPMT's growth, emphasizing the AICTE Ideal Lab's role in fostering student innovation .

The celebration featured cultural performances by students, including dance and singing that expressed their patriotism. A prize distribution ceremony followed, recognizing faculty achievements in research and patents.

We are incredibly proud to acknowledge the remarkable achievements of our Faculties: Ms. Rupali Vyas for her distinguished SCI paper and Conference Paper. Dr. Suman Kumar Swarnkar for his Grant Patent and Valuable Book Chapter, Ms. Priyata Mishra,Ms. Shweta Singh Rathore for their Grant Patents. Ms. Jyoti Gautam, Dr. Rakesh Khare and Mr. Vivek Kumar Soni for their Design Patents and Book Chapters. Mr. Devbrat Sahu and Dr. Sapna Singh Kshatri for their valuable Book Chapters. Mrs. Keshika Jangde for her Design and Grant Patent. Mr. Manoj Kumar Singh and Ms. Rupali Vyas for their outstanding Conference Paper.

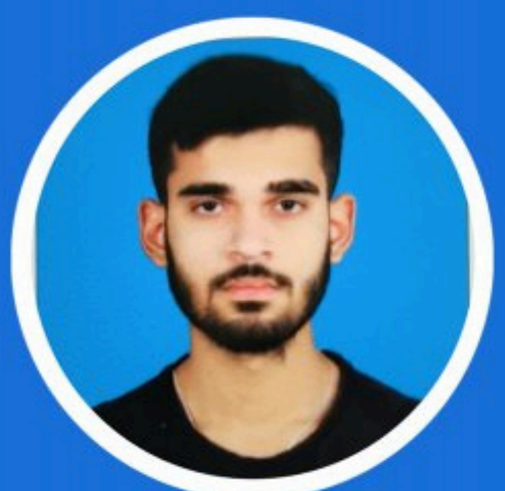
The NSS Cell organized a tree-planting drive themed "EK PEDH MAA K NAAM" (A Tree in Mother's Name), symbolizing the importance of planting trees for a greener future.

NEWSLETTER TEAM

With great pleasure, I offer our newsletter's most recent edition. We hope that our readers will find this issue to be both educational and motivational. Your encouragement and suggestions motivate us to produce interesting and educational content.
Our objectives are to stimulate curiosity, encourage creativity, and keep our audience informed about the newest trends.We are influencing the technological dialogue collectively. Let's keep going after excellence. With heartful appreciation,

Rupali Vyas
Mentor
CSE Newsletter

TEAM HEAD



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