BSAITM NEWSLETTER

HIGHLIGHTS

DLUME 2 EPTEMBER 2024

- INDEPENDANCE DAY
 CELEBRATION
- SPACE DAY SEMINAR
- TEACHERS DAY CELEBRATION



BABA SAHEB AMBEDKAR INSTITUTE OF TECHNOLOGY & MANAGEMENT



INDEPENDANCE DAY CELEBRATION

Independence day celebration took place on 14th Aug 2024, where candidates showcased wonderful performances & Speeches on the topic of independance . You can turn to page no -5 to read the full article.

SPACE DAY SEMINAR

ISRO's notable achievements include the successful Mars Orbiter Mission (Mangalyaan), making India the first nation to reach Mars in its first attempt, and the Chandrayaan missions, which advanced lunar exploration. Its cost-effective satellite launches are globally recognized. You can turn to page no-6 to read the full article.



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THE EVOLUTION OF ARTIFICIAL INTELLIGENCE: OPPORTUNITIES AND CHALLENGES

Abstract:

Artificial Intelligence (AI) has undergone significant transformations since its inception. From rule-based systems to machine learning and deep learning, AI has emerged as a transformative technology. AI (Artificial Intelligence) refers to the simulation of human intelligence in machines that are programmed to think and learn like humans. The term can also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving. The term was coined in 1956 by John McCarthy, and since then, AI has come a long way.



Evolution of AI:

1. Rule-Based Systems: The first generation of AI focused on rule-based systems, where machines were programmed to follow a set of rules to solve problems.

2. Machine Learning: The second generation introduced machine learning, where machines learned from data without being explicitly programmed.

3. Deep Learning: The third generation saw the emergence of deep learning, a subset of machine learning that uses neural networks to analyze data.

Applications of AI:

1. Virtual Assistants: AI-powered virtual assistants, like Siri and Alexa, have revolutionized the way we interact with technology.

2. Image Recognition: AI-based image recognition systems have improved healthcare, security, and surveillance.

3. Natural Language Processing: AI-powered NLP has enabled machines to understand and generate human language.

Python is a popular and widely-used language in AI programming. Its simplicity, flexibility, and extensive libraries make it an ideal choice for various AI applications, including:

1. Machine Learning: Python's scikit-learn library provides efficient algorithms for classification, regression, clustering, and more.

2. Deep Learning: Popular frameworks like TensorFlow, Keras, and PyTorch offer Python APIs for building and training neural networks.

3. Natural Language Processing (NLP): NLTK, spaCy, and gensim libraries provide tools for text processing, sentiment analysis, and topic modeling.

4. Computer Vision: OpenCV and Pillow libraries enable image and video processing, object detection, and segmentation.

5. Robotics: Python is used in robotics for tasks like motion planning, control systems, and sensor integration.

Overall, Python's versatility, ease of use, and extensive libraries make it a popular choice for AI programming

Here are some other best software for AI programming :

P**ieces for Developers:** This is one of the best AI tools for software development, designed to improve developer's efficiency and collaboration by allowing them to save, enrich, search, reference, and reuse their code snippets in a more organized and productivity-focused way.

Tabnine: This is an AI-powered code completion tool that suggests the most suitable lines of code completion based on the context of what the developer writes.

OpenAl Codex: This is an AI tool developed by OpenAI to understand and write codes. It is also capable of translating natural language into text.

Amazon CodeWhisperer: This is one of the best AI tools for developers working within the Integrated Development Environment (IDE) and command line. Amazon CodeWhisperer generates code in real-time in the IDE based on your existing code and comments.

GitHub Copilot: This is one of the most used AI tools for developers. According to GitHub, their copilot has been activated by more than one million developers and adopted by over 20,000 organizations. This tool primarily helps developers auto-complete their code in the IDE, similar to Tabnine.

Figstack: This is one of the best AI tools for web development, enabling you to read and write code across multiple languages.

Replit Ghostwriter: This is an online-based IDE in which developers can prototype, making use of resources available on the cloud. It's bundled with an AI assistant called "Replit Ghostwriter" which is capable of providing real-time code explanations, edits and completions.

Snyk: This is a cloud-based code analysis tool that helps to locate the vulnerabilities in security and open source license compliance issues in a developer's code.

Sourcery: This is another option in AI tools for developer productivity. It offers AI code generation tools with a central focus on assisting developers to write cleaner and more efficient code.

Advantages of AI:

1. Increased Efficiency: AI can automate repetitive tasks, freeing up human resources for more complex and creative tasks.

2. Improved Accuracy: AI systems can perform tasks with precision and accuracy, reducing the likelihood of human error.

3. Enhanced Decision Making: AI can analyze vast amounts of data, providing insights that inform strategic decisions.

4. Personalization: AI enables personalized experiences, such as tailored recommendations and customer service.

5. 24/7 Operation: AI systems can operate continuously, providing round-the-clock support and services.

Challenges and Ethics:

1. Job Displacement: AI may replace human jobs, particularly those involving repetitive tasks.

2. Bias and Discrimination: AI systems can perpetuate biases present in the data used to train them.

3. Security Risks: AI systems can be vulnerable to cyber attacks and data breaches.

Conclusion:

Al has the potential to transform various aspects of our lives, from healthcare to education. However, it's essential to address the challenges and ethics associated with AI to ensure its responsible development and deployment.

KAPIL SINGH (ASSISTANT PROFESSOR) HOD CSE DEPARTMENT (MCA, M,TECH IT, NET QUALIFIED)

BSAITM Newsletter

10TH SEP 2024 | @BSAITMVIKASPURI



WORLD NEWS

Recent world events in early September 2024 have highlighted significant geopolitical, environmental, and social developments:

Middle East: In Israel, public demonstrations are intensifying, demanding a ceasefire with Hamas after six Israeli hostages were killed during a rescue mission in Gaza. Prime Minister Benjamin Netanyahu faces criticism for his handling of the situation, but he insists that Hamas needs to make concessions for peace to be possible

South Asia: Bangladesh is grappling with catastrophic floods, affecting millions, particularly in refugee camps housing Rohingya from Myanmar. These floods, exacerbated by climate change, are causing widespread devastation. Additionally, a polio vaccination campaign has been initiated in Gaza to prevent an outbreak after the discovery of a polio case.



Africa: In Kenya's Great Rift Valley, efforts are underway to restore the Mau Forest, which has suffered severe deforestation. Women from local communities are leading a reforestation campaign, aiming to plant 100,000 trees this season

Europe: Ukraine, continued Russian military attacks have devastated regions across the country. The UN's call for the protection of schools highlights the grim reality faced by children as the new school year begins amid ongoing conflict

North America in the United States, more than 10,000 hotel workers have gone on strike across major cities like Honolulu and San Francisco. The workers are demanding better pay and working conditions, with the strikes affecting major hotel chains such as Marriott and Hilton

SOUTH AMERICA A UN-backed conference in Brazil brought together governments and experts to address the dual challenges of the climate emergency and sustainable development. Solutions focusing on synergy between climate action and development goals were discussed.

The above news shows from environmental crises to ongoing conflicts and socio-economic struggles across continents.



Develop a passion for learning new skills. If you do, you will grow confidently

At Baba Saheb Ambedkar Institute of Technology and Management education is not a mere transaction of knowledge, discovery of new ideas and curiosity. It is a place where classrooms echo with harmonious exchange of thoughts and educators inspire and guide our students for learning new skills.

The visionary leadership of our Chairman " has set a standard of excellence that inspires the entire BSAITM, Vikaspuri team to embrace challenges, and strive for greatness.

I congratulate the editorial team of our Director (Operations) Mr. Aditya Dasgupta for bringing out another edition of the newsletter. As the pages filled with the stories of our triumphs and cultural journey.

Students, your talent, dedication and involvement in extracurricular activities demonstrates your well-roundedness and commitment to personal growth are praiseworthy. Your talent, dedication, and teamwork are truly commendable.

Thank you for being a valuable member enriching of our Institute community and for sharing your talents with us. Keep up the outstanding work!

I look forward to witnessing your continued growth and success...

Happy Reading!

Ms. Harpreet Sharma Associate Manager

!!! UPCOMING TRIP FOR NCR COMING, STUDENTS WHO ALL ARE INTERESTED CONTACT DTQR TEAM !!!

EVENT LETTER



Issue 002

September , 2024/Vol. 002

Independence day

The 15th of August 2024 marked yet another grand celebration of Independence Day at BSAITM. The atmosphere was charged with patriotism as students, faculty, and staff came together to commemorate 77 years of India's independence. The event, held in the college's main courtyard, was a perfect blend of cultural performances, inspirational speeches, and tributes to the nation.

Speeches and Reflections

Emphasizing the significance of Independence Day and the sacrifices made by countless freedom fighters. "Independence is not just a celebration but a responsibility," said, urging students to contribute to the country's progress through education and moral values.

Student representatives also delivered short speeches, reflecting on the importance of freedom in today's context and reminding everyone that true independence comes from eradicating social evils like inequality, corruption, and illiteracy.



Cultural Performances

One of the most anticipated parts of the day was the cultural program, organized by the students. The event included Patriotic Dance Performances, & Skits and Plays

Awards and Recognitions

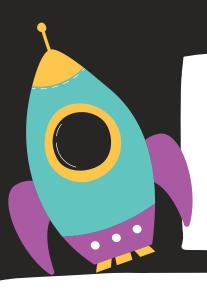
The college took the opportunity to honour students and faculty members who participated in the independence day programme. The awards were handed out by the Dr Soma Dasgupta Secretary BSATES The recognition of achievements in participation further inspired everyone to be active in cultural events by participating in upcoming events.



CONCLUSION

The event concluded with a vote of thanks by the Principal Er,Anuradha Sharma , who expressed gratitude to all the participants and organisers for their efforts in making the day memorable. As the event drew to a close, everyone was left with a deep sense of pride for their country and a renewed commitment to contribute positively to its future.

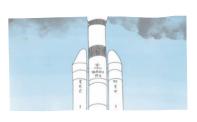
The 2024 Independence Day celebration at BSAITM was a perfect reminder of the importance of freedom and the responsibility each of us holds in preserving the values on which our nation was built. It was not just a celebration, but a reflection on how far we've come and the journey that lies ahead.



NATIONAL SPACE DAY

23 AUGUST 2K24

On Space Day, BSAITM hosted a special program featuring a documentary on ISRO's space achievements. Students gathered in the auditorium to watch the inspiring film, highlighting India's space missions. The event fostered curiosity about space exploration and showcased ISRO's remarkable contributions to global space research.



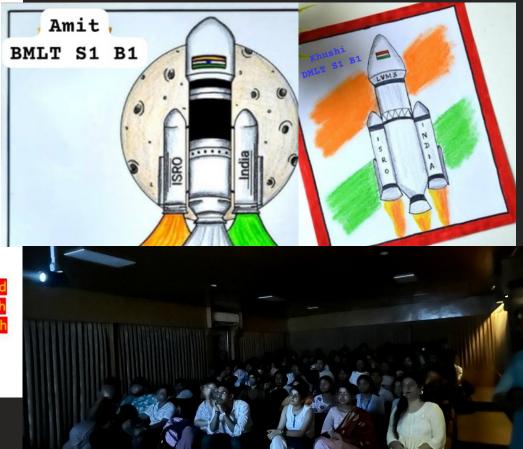




#ISRO MADE INDIA PROUD



"To the ISRO team, on this historic day, I wish you all the best for the Chandrayaan-3 mission. May your hard work and dedication be rewarded with a successful landing on the lunar south pole."



TEACHER'S DAY CELEBRATION

"Teachers affect eternity; no one can tell where their influence stops." – Henry Brooks Adams

"It is the supreme art of the teacher to awaken joy in creative expression and knowledge." – Albert Einstein

Teachers play a fundamental role in shaping society by guiding and educating students. They do more than impart academic knowledge; they inspire curiosity, nurture creativity, and help build character. Teachers create supportive learning environments where students feel empowered to explore their potential. They often serve as role models, influencing not just intellectual growth but also social and emotional development.

Beyond textbooks, teachers help students develop critical thinking skills, problem-solving abilities, and a sense of responsibility. Their impact extends far beyond the classroom, shaping future leaders, innovators, and responsible citizens. A great teacher can leave a lasting imprint, influencing the direction of a student's life.





celebrated Teachers' Day with enthusiasm, honoring the hard work and dedication of its faculty. The event began with heartfelt speeches from students, expressing gratitude for their teachers' guidance and support. Following the speeches, students performed a vibrant cultural dance, showcasing traditional music and costumes. The performances filled the auditorium with energy, celebrating both the teachers and the diverse heritage of the college. The day ended with a token of appreciation presented to the teachers, making it a memorable and heartfelt occasion for everyone involved.



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MISSION INCREDIBLE INDIA

BABA SAHEB AMBEDKAR INSTITUTE OF TECHNOLOGY AND MANAGEMENT

MISSION INCREDIBLE INDIA

JURASIC PARK

DATE 11 TH SEPTEMBER 2024

DAY TOUR COST 1600/-

INCLUDES TRANSPORT/ AMUSMENT & WATER PARK TICKETS/ WELCOME DRINK WITH SANDWICH/ LUNCH

DAY TOUR TIMING WILL BE FROM 7AM TO 7PM BUSES WILL PICK AND DROP AT CAMPUS

Book Now

8800014848 HARPREET SHARMA ORGANIZER



BE DIFFERENT FROM THE CROWD

Act naturally: Why Being Different is Great

PRESENTATION

Do you feel as you don't fit in? Like you're not the same as every other person? That is not a problem! Being different makes you extraordinary. As I generally say, "Being different isn't a shortcoming, it's a strength. It separates us and permits us to have a significant effect on the planet." Here, we'll discuss why it's great to appear as something else and how to act naturally.

The force of being unique

At the point when you adjust, you conceal your actual self. Yet, when you're unique, you stick out. You can:

- Be inventive and imaginative
- Fabricate certainty and self-articulation
- Captivate everyone
- Have an effect on the planet

My Viewpoint

I accept that being different makes life fascinating. On the off chance that everybody something very similar, the world would be an exhausting spot. Our disparities make us and unique. In this way, make it a point to act naturally and let your real nature sparkle.

After School ActivitiesInstructions to Act naturally

- All in all, how might you act naturally in a world that believes you should adjust? Here are a few hints:
- Face challenges and attempt new things
- Investigate new interests and leisure activities
- Encircle yourself with individuals who like you for what your identity is
- Be consistent with yourself and don't conceal your peculiarities
- Practice taking care of oneself and self esteem
- Try not to contrast yourself with others

The Significance of Being Genuinely You

Being true is significant in this day and age. With online entertainment, it's not difficult to profess to be somebody else. Yet, being valid liberates you. At the point when you're true, you:

- Construct entrust with others
- Foster areas of strength for an of self
- Carry on with a more significant life
- Motivate others to act naturally

Advantages of Being Unique

- You'll catch everyone's eye
- You'll be more certain
- You'll be more imaginative
- You'll have an effect on the planet

End

Being different isn't a shortcoming, it's a strength. Make it a point to act naturally. You're exceptional and extraordinary, and that is the thing makes you astonishing. Keep in mind, the world necessities more individuals who are adequately valiant to act naturally. In this way, go out there and be really you.

NAME- ABHAY JHA DEPARTMENT - DIPLOMA IN COMPUTER SCIENCE ROLL NO - B240167

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ENVIRONMENTAL EDUCATION

Mansoor Alam Diploma in Electrical Engineering Semester _1



Environmental education is the process that allows individuals to explore environment issues, engage in problem solving and take action to improve the environment. As a result individuals develop a deeper understanding of environment issues and have the skill to make <u>informed and</u> responsible decision.

The component of environmental education are:

- 1. Awareness and sensitivity to environment and environment challenge
- 2.Knowledge and understanding of environment and environmental challenges.
- 3. Attitudes of concern for the environment and motivation to improve or maintain environment quality.
- 4. **Skill** to identify and help to resolve environmental challenges.
- 5. Participation in activities that lead to resolution of environmental challenges.

Environmental education does not advocate a particular viewpoint or course of action. Rather , environmental education teach individuals how to weigh various sides of an issue through critical thinking and it enhance their own problem solving and decision making skills.

The national environment education act of 1990 requires EPA <u>(Environmental protection</u> <u>Agency)</u> to provide national

leadership to increase environmental literacy. EPA established the office of environmental education to implement this program

National environmental education training program:

EPA supports environmental education and training for teachers and other education professionals through the national environmental education and training program (NEETP) informally known as the office of environmental education teacher training program.

STUDENTS CRAFT METAL STOOL FROM SCRAP



In an impressive display of skill, creativity, and teamwork, students of the Mechanical Engineering department at Baba Saheb Ambedkar Institute of Technology and Management, Vikaspuri, have successfully crafted a sturdy metal stool using scrap materials found in the institute's mechanical lab. The project was carried out under the supervision of Assistant Lecturer Sajid, a dedicated mentor known for encouraging practical, hands-on learning experiences.



The Project Overview

The project was initiated as a part of the lab's focus on sustainable engineering practices, where students are encouraged to reuse materials and minimize waste. Instead of purchasing new materials, the students decided to take up the challenge of creating a functional piece of furniture from scrap. The project aligns with the institute's ethos of promoting ecofriendly practices and innovation in engineering design.

Guidance from Assistant Lecturer Sajid

Assistant Lecturer Sajid, an experienced faculty member, has been a driving force behind many such initiatives at the mechanical lab. Known for his practical approach to teaching, Sajid believes that students learn best when they are directly involved in the creation process. He provided valuable guidance throughout the project, helping students understand the importance of material selection, structural integrity, and design efficiency.

"Working with scrap metal forces students to think creatively and develop solutions that they might not consider with new materials," said Sajid. "It's not just about building something; it's about understanding the limitations and possibilities of the materials at hand and how to innovate within those constraints."

Mechanical club



The Process

The project began with students collecting usable scrap metal from previous lab projects, including steel rods, plates, and other discarded materials. The team, consisting of second and third-year mechanical engineering students, then brainstormed design ideas, aiming to create a stool that was both functional and aesthetically pleasing.

Under Sajid's guidance, they followed a detailed process:

- 1. Design Phase: Students created sketches and 3D models of the stool, considering factors such as weight distribution, durability, and balance.
- Material Preparation: The scrap metal was cut, welded, and shaped according to the design specifications. Students used various mechanical tools, including cutting machines, welding equipment, and grinders.
- 3. Assembly and Finishing: Once the individual parts were ready, the team assembled the stool, ensuring precision in welding and joint placement. After assembly, they polished the metal to give the stool a finished look.
- 4. Testing: The stool underwent load-bearing tests to ensure it could withstand significant weight. The final product was a success, proving both sturdy and practical.

Student Experience

The students involved expressed immense satisfaction with the project, as it allowed them to apply theoretical knowledge to real-world applications. "We got to work with tools and materials we usually only study about in textbooks," said one of the students. "It was challenging but rewarding to see the final product come together."

Looking Ahead

This project is one of many initiatives being promoted by the mechanical department at Baba Saheb Ambedkar Institute of Technology and Management to enhance student learning through practical experience. Assistant Professor Sajid plans to encourage more such projects in the future, involving not only scrap metal but other sustainable materials.

The stool now proudly sits in the mechanical lab as a symbol of student innovation and the value of hands-on education.