VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE

AI&DS Insights

Monthly Awareness Bulletin

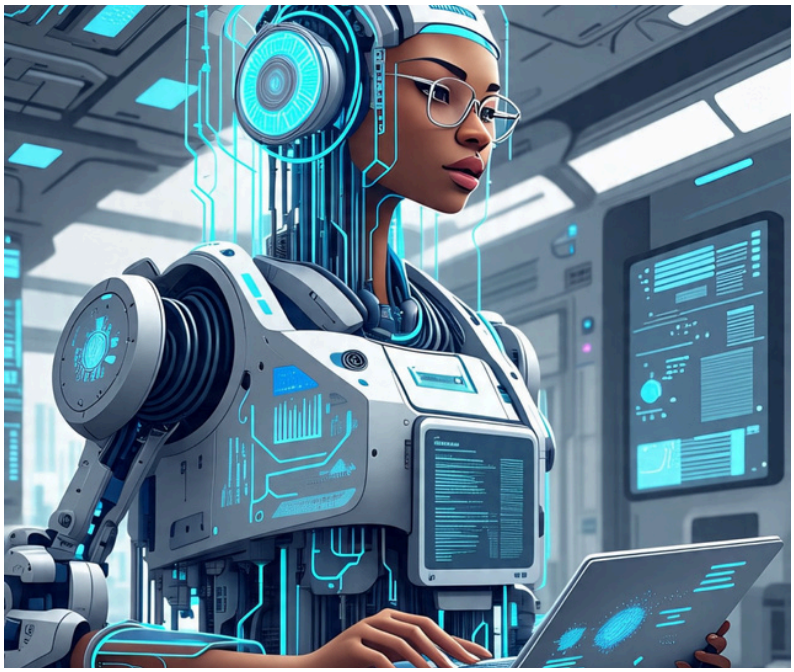
ISSUE 08 | April 2025

Believe you can and you're halfway there.

Theodore Roosevelt

Dr. BABASAHEB AMBEDKAR

TOON



Dr. Babasaheb Ambedkar, also known as the father of the Indian Constitution, was a visionary leader, social reformer, and champion of human rights. Born into a marginalized Dalit family, he rose through immense hardship to become one of the most educated and influential figures in Indian history. He tirelessly fought against caste discrimination and worked to uplift the oppressed through education, legal reforms, and political action. As the principal architect of the Indian Constitution, he laid the foundation for a democratic and inclusive India, ensuring justice, equality, and liberty for all. His legacy continues to inspire generations striving for social justice and equality.

Faculty Article

Green AI: Building a Smarter, Sustainable Future

The exponential growth of Artificial Intelligence(AI), has ushered in a new era of innovation across sectors, from natural language processing to autonomous systems. However, this advancement comes at a cost—often an invisible one. The training and deployment of large-scale AI models have significant environmental implications, primarily due to their high energy consumption and carbon emissions. This has led to the emergence of Green AI: a paradigm that emphasizes the development of energy-efficient and environmentally sustainable AI systems without compromising the performance.

Green AI refers to the practice of developing and deploying AI technologies with a focus on minimizing their environmental impact. While AI promises tremendous benefits across industries—from healthcare to transportation—its growing energy footprint is a cause for concern. Training large-scale AI models like GPT or image recognizers often requires massive computational resources, leading to high carbon emissions and power consumption. As AI adoption scales up, so does its energy demand too. This is where Green AI becomes not just an option but a necessity.

The Road Ahead: Towards a Sustainable AI Ecosystem
As we build smarter machines, we must also build a smarter relationship with our environment. Green AI is our opportunity to do both. For computing professionals, this field offers rich research directions that align technical depth with ecological responsibility. Here are some key research directions in Green AI:

··Energy-Efficient AI Models – Develop compact and optimized AI architectures to reduce training and inference power consumption.
·Sustainable Data Centers & AI Infrastructure – Improve data-center energy use through AI-driven cooling, workload scheduling, and renewable integration.
·Algorithmic Sustainability – Design algorithms that deliver high performance with minimal computation and data requirements.
·Life Cycle Assessment of AI Models – Evaluate and track the environmental impact of AI systems from development to deployment.
Green AI for Climate & Environment – Apply AI solutions to environmental challenges like climate monitoring, conservation, and energy management.
·Low-Resource Computing & Edge AI – Enable intelligent processing on edge devices to reduce reliance on cloud infrastructure and energy overhead.
·Green Software Engineering for AI – Incorporate eco-friendly practices into the AI development lifecycle for more sustainable software.
·Policy, Fairness, and Transparency in Green AI – Promote regulations and standards that ensure ethical, fair, and eco-conscious AI deployment.

Conclusion

FGreen AI, is the movement that aims to make artificial intelligence more energy-efficient, environmentally sustainable, and also to be ethically sound. As the field matures, incorporating energy efficiency as a unrivaled objective—alongside accuracy and fairness—will be key to building a truly sustainable AI future. Governments, industries, and consumers are increasingly prioritizing green practices, and AI must evolve in that direction too.
"Embracing Green AI is not just a choice but a commitment to a sustainable and equitable technological era."

Dr. Deepa Abin
Associate Professor, AI&DS Department

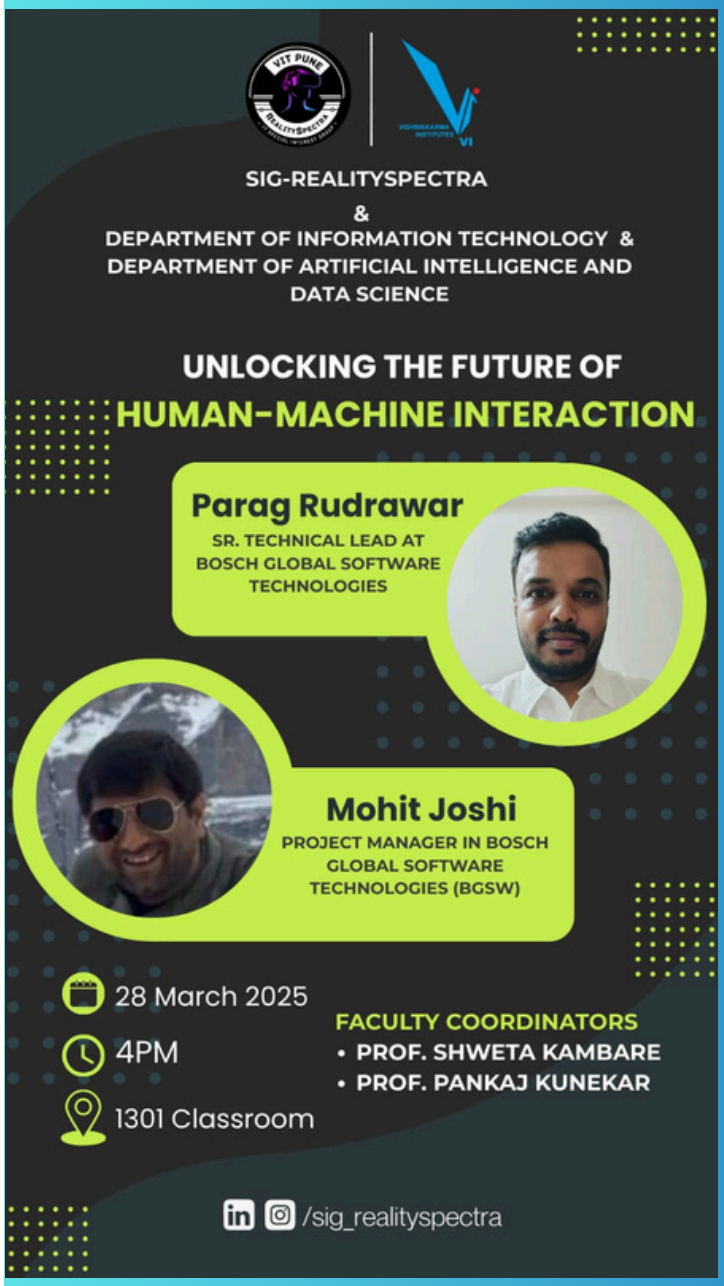
Activities

Host India's Premier Financial Literacy Quiz on Money, Wealth, Business, and Investing for Vishwakarma Institute Of Technology students! This prestigious event was organized by Zerodha Varsity and planned & executed by The Investment Forum,VIT Pune

Key Highlights:
✅ 110+ enthusiastic teams competed, showcasing their Economics, Finance, Wealth, and Entrepreneurship knowledge.
✅ The energy, curiosity, and passion for financial literacy among students were truly inspiring!
✅ A fantastic learning experience, helping students build a strong foundation in financial decision-making. Institute of Information Technology, Pune attended the session.

We are happy to share that the Department of Artificial Intelligence and Data Science, Vishwakarma Institute of Technology, Pune, is organizing a one-week Online Faculty Development Programme on "Next Gen AI skills: A Practical Approach for educators" .This FDP will offer valuable insights into the evolving role of Generative AI in education and industry. It will address key technological challenges and showcase AI-driven solutions to overcome them. Educators will gain practical skills to integrate GenAI innovations into teaching, research, and problem-solving.

Activities



Under MOU with Bosche, an expert session was organised for students by Bosche team on "Overview of HMI".

Faculty Publications

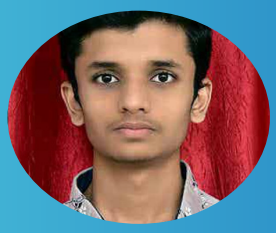
Name	Summary
Dr. Varsha Jadhav	Published Research Paper in Scopus Indexed International Journal of Information System Engineering and Management " Learning Student Stress Intention: An Interdisciplinary Analysis of Psychological, Environmental, and Academics Contributors using Machine Learning
Sanjivani Adsul	Blood Donation Management Application

Team - AI&DS INSIGHTS

Dr Minal Barhate

Prof. Lokesh Khedekar

Ishika Golecha
SY AIDS-A



Gaurang Gulhane
SY AIDS-A

Utkarsha Dhawle
SY AIDS-A

Janhavi Deo
SY AIDS-A