

Artificial Intelligence Appreciation Day

Celebrating the Impact and Future of AI

(Ministry of Skill Development and Entrepreneurship)

July 16, 2024

Introduction

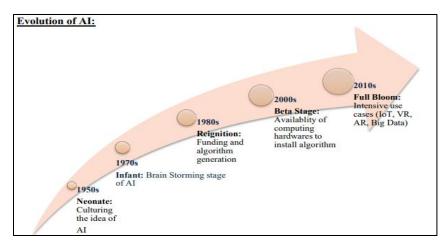
As India embraces the technological revolution, Artificial Intelligence Appreciation Day on July 16, 2024, marks a pivotal moment to reflect on AI's transformative impact across the nation. From urban tech hubs to rural villages, AI is reshaping industries, healthcare, education, and governance. India's emerging status as a global AI powerhouse is evident in cities like Bengaluru, Hyderabad, and Pune. Government initiatives such as "AI for All" and the National AI Strategy underscore India's commitment to harnessing AI for societal benefit. As we celebrate AI's potential to address uniquely Indian challenges, we must also consider ethical implications and ensure inclusive development that preserves our cultural values and benefits all citizens.



The evolution of AI in India

¹The history of Artificial Intelligence in India is a story of gradual growth, culminating in rapid acceleration in recent years.

²While India wasn't at the forefront of early AI research, it has made significant strides in the field, particularly since the turn of the millennium.



1. Early Days (1960s-1980s):

- o Indian institutes like IIT Kanpur and IISc Bangalore began computer science research, laying the groundwork for future AI development.
- In 1986, the Knowledge Based Computer Systems (KBCS) project was initiated, marking India's first major AI research program.

2. Foundations (1990s):

- The establishment of C-DAC (Centre for Development of Advanced Computing) in 1988 boosted supercomputing capabilities, indirectly supporting AI research.
- Indian software companies began exploring AI applications, primarily in business process
 automation.

3. Growth Phase (2000s):

- Indian IT giants like TCS, Infosys, and Wipro started investing in AI research and development.
- o Academic institutions expanded their AI and machine learning programs.

4. Acceleration (2010s):

- 2014-15: The "Digital India" initiative was launched, emphasizing the importance of emerging technologies including AI.
- 2018: NITI Aayog released the National Strategy for Artificial Intelligence, outlining India's approach to leveraging AI for economic growth and social inclusion.
- o Indian startups focusing on AI solutions began to emerge and attract significant funding.

¹ https://www.indiascienceandtechnology.gov.in/sites/default/files/AI%20Trend%20story.pdf

² https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf

5. Current Era (2020s):

- o AI has become a key focus area for both government and private sector initiatives.
- o India is positioning itself as a global AI hub, with applications ranging from healthcare to agriculture to smart cities.
- o The government has launched initiatives like "AI for All" and is integrating AI into various sectors including education and governance.

Throughout this journey, India has leveraged its strengths in software development and data processing to carve out a unique position in the global AI landscape. The country's diverse demographic and complex socio-economic challenges have also provided a fertile ground for developing AI solutions tailored to emerging markets.

Today, India stands at the cusp of an AI revolution, with the potential to become a leader in ethical and inclusive AI development that addresses both local and global challenges.

Government Initiatives: AI for India 2.0

On July 15, 2023³, just ahead of World Youth Skills Day, the Ministry of Skill Development & Entrepreneurship launched the "AI for India 2.0" initiative. This program represents a significant step in the government's efforts to promote AI education and skill development. This program represents a significant step in the government's efforts to promote AI education and skill development.



³ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1939809

Key features of the "AI for India 2.0" initiative include:

- ❖ Launched on World Youth Skills' Day, July 15, 2023.
- ❖ A joint initiative of Skill India and GUVI.
- ❖ Offers free online training on Artificial Intelligence accredited by NCVET and IIT Madras.
- ❖ Aimed at equipping youth with essential AI skills to prepare them for future job markets.
- * Emphasizes breaking language barriers in technology education by offering courses in multiple Indian languages.

AI for progress: Some leading initiatives for growth

- **Skill India AI Portal**: An online platform offering AI courses, tutorials, and certifications collaboration with firms educational institutions. tech and
- ❖ National AI Skilling Program: Enhancing AI skills through customized training modules with industry leaders, covering machine learning, data science, and AI ethics.
- * AI Youth Bootcamp: Hands-on projects, hackathons, and mentoring by experts to foster

AI interest and problemsolving skills among young

learners.

- * AI in Vocational **Training:** Integrating AI vocational tools into enhance programs to worker efficiency adaptability in traditional trades.
- **❖** AI Research and Innovation **Fund:** Supporting AI research projects and startups with grants to address global challenges through innovative AI solutions.
- * AI Competency **Development Centers:**

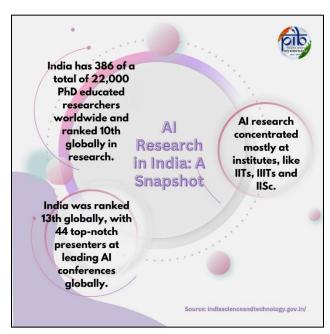
National Al Al Youth Skilling Bootcamp **Program** Al for Skill India Al in Al Portal Vocational progress: Training some leading initiatives for growth Collaborations Al Research with Global and Innovation Tech Giants Fund AI Competency Development Centers

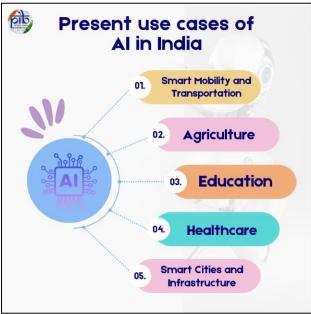
Establishing hubs across regions for AI education, research, and industry collaboration.

❖ Collaborations with Global Tech Giants: Partnering with Microsoft, Google, and IBM to offer world-class AI education, joint certifications, and research initiatives in India.

⁴ Transforming India: AI's Role in Key Sectors and Research Ecosystem

AI is revolutionizing India, enhancing urban mobility with autonomous vehicles and smart traffic management, optimizing agriculture with precision farming, and personalizing education through intelligent tutoring systems. In healthcare, AI improves diagnostics and patient care, while in smart cities, it enables efficient energy management and intelligent surveillance.





India's AI research ecosystem thrives with government initiatives like the National AI Strategy, academic institutions conducting cutting-edge research, and industry partnerships fostering innovation. The vibrant startup ecosystem develops diverse AI solutions, positioning India as a global AI leader and driving sustainable growth and development.

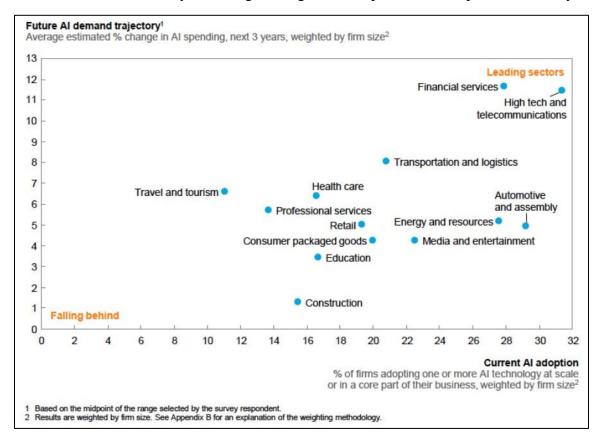
AI Adoption across all sectors:

Looking ahead, the potential applications of AI seem boundless. Some areas of future development include:

- 1. **Advanced Healthcare:** AI could lead to breakthroughs in personalized medicine, early disease detection, and even reversing aging processes.
- 2. Climate Change Mitigation: AI may play a crucial role in developing sustainable technologies and optimizing resource usage to combat climate change.

⁴ https://www.indiascienceandtechnology.gov.in/sites/default/files/AI%20Trend%20story.pdf

- 3. **Space Exploration:** AI-powered systems could assist in the exploration and potential colonization of other planets.
- 4. **Artificial General Intelligence (AGI):** The development of AI systems with human-like general intelligence remains a long-term goal for researchers.
- 5. ⁵**Human-AI Collaboration**: Future advancements may lead to a seamless integration of AI assistants in our daily lives, augmenting human capabilities in unprecedented ways.



Global IndiaAI Summit 2024: Shaping the Future of AI

On July 3-4, 2024, India hosted the Global IndiaAI Summit at Bharat Mandapam, New Delhi, marking a significant milestone in the country's AI journey. Inaugurated by Union Minister Shri Ashwini Vaishnaw, the summit brought together over 12,000 global AI experts, practitioners and the delegates from 50 countries, showcasing India's growing



⁵ https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf

influence in the global AI landscape. The event showcased India's leadership in <u>Global</u> <u>Partnership on Artificial Intelligence (GPAI)</u> ⁶ and its commitment to fostering responsible AI development globally.

Key highlights included:

- 1. **Focus on seven pillars of the IndiaAI Mission:** Compute Capacity, Foundational Models, Datasets, Application Development, Future Skills, Startup Financing, and Safe AI.
- 2. **12 comprehensive sessions** covering various aspects of AI, from large language models to global health applications.
- 3. Emphasis on democratizing AI technology and making it accessible to all.
- 4. Discussions on **India's infrastructure readiness for AI** and ensuring safety, trust, and governance in the AI age.
- 5. Showcasing of real-world AI solutions by 16 deep-tech startups.
- 6. International collaboration, with participation from global tech leaders and policymakers.
- 7. Alignment with India's \$1.25 billion IndiaAI Mission, approved in March 2024.
- 8. A new integrated partnership on AI between the Organisation for Economic Cooperation and Development (OECD) and the Global Partnership on Artificial Intelligence (GPAI), further solidifying international cooperation in AI governance and development.



📍 At Global IndiaAI Summit 2024

⁶ https://indiaai.gov.in/globalindiaaisummit/about

The Global IndiaAI Summit 2024 serves as a pivotal platform for global stakeholders to collaborate, innovate, and shape the future of AI. India reiterates its commitment to harnessing AI's transformative potential by prioritizing responsible AI development while safeguarding ethical standards and inclusivity. As the summit unfolds, it is poised to reinforce India's leadership in the global AI landscape, paving the way for a future where AI benefits are accessible to all and contribute significantly to socio-economic advancement worldwide.

Conclusion

Artificial Intelligence Appreciation Day serves as a reminder of the incredible progress we've made in developing intelligent systems and the vast potential that lies ahead. It's a day to marvel at the achievements, critically examine the challenges, and actively participate in shaping an AI-enabled future that benefits all of humanity.

As we celebrate this day, let's embrace the transformative power of AI while remaining mindful of our responsibility to guide its development ethically and sustainably. The future of AI is not predetermined – it's a future we all have a hand in creating.

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Santosh Kumar/ Sarla Meena/ Ritu Kataria/ Anjali Gupta