India's Own AI Ecosystem

Building India's Own AI Ecosystem – Abhishek Singh, Additional Secretary, MeitY and DG, NIC, in an Exclusive Interview with Moneycontrol

"Today, we have almost 38,000 GPUs available at a very low cost — less than a dollar per GPU per hour — for our industries, start-ups, and researchers. We are supporting 12 Indian initiatives including start-ups, industries, and academia in building Indian LLMs and SLMs to reduce our dependency on Western models and create models aligned with Indian languages, heritage, and culture.

We have enabled a datasets platform called AI Kosh, which has grown from around 300 datasets in March this year to more than 3,000 datasets in six months. It now hosts 240 models, a sandbox environment, and tools for building applications. Both Government and private sectors are contributing datasets across domains like agriculture, climate, healthcare, education, and governance to build applications tuned to our requirements.

We are one of those countries which doesn't shy away from letting Western companies operate in India while we build up our own capabilities. We let innovative global platforms operate while supporting Indian solutions. Indian entrepreneurs, start-ups and engineers have the capabilities to make world-class products — it requires investment and patient capital. The mistake analysts make is comparing India's $1 billion AI mission with industry investments elsewhere. Our private sectors - Yotta, E2E, NextG, Jio, TCS, Sify — have invested heavily. TCS alone announced a $1 billion plan, Microsoft a $3 billion investment, and Google and IBM are also coming in. So, India's total AI investment is much more than $1 billion.

The government's commitment is clear — public spending will never be a bottleneck. The ₹10,000 crore allocation is just a starting point. Once foundational models like BharatGPT or Sarvam are ready, we will also support inferencing and application development.

Government is committed to incubate this entire sector, because the long-term gains far outweigh the investment. We believe India will soon reach its rightful place in the global AI ecosystem."

SIO paid a courtesy visit to Shri Mohan Charan Majhi, Hon'ble Chief Minister of Odisha and apprised him of the various e-Governance solutions being implemented by NIC in the State.

Habishyali Accommodation System under ServicePlus Platform

During the sacred month of Kartik, thousands of Habishyali—mostly elderly women from across Odisha—stay at the holy city of Puri to observe the Kartika Brata at the revered temple of Mahaprabhu Shri Jagannath. To ensure their comfort and well-being, the Government provides accommodation and other essential amenities.

For the year 2025, the online registration process for Habishyali accommodation was successfully implemented through the ServicePlus platform. The web application enabled applicants to conveniently register online within the stipulated period. All applications were processed in accordance with the eligibility criteria defined by the District Administration, and accommodation slips were generated for eligible applicants.

Applicants were notified via SMS about the status of their applications, the accommodation centre allotted to them, and the date and time for reporting. The entire process—from registration to allocation—was completed smoothly and efficiently within a short timeframe. The District Administration appreciated the dedicated efforts of the NIC Team for the seamless and user-friendly implementation of the system.

Ensuring High Quality Video Conferencing and Webcasting of Events of Hon'ble PM

The Prime Minister Dhan Dhaanya Krishi Yojana (PMDDKY) was launched in October 2025, with a major event hosted by the Hon'ble Prime Minister on 11th October, 2025, at Indian Agricultural Research Institute, New Delhi. The launch was live-streamed to farmers across the state and was accompanied by the inauguration of various other agriculture and allied sector projects.

17th tranche of "ROZGAR MELA" Mission Recruitment was held at Rail Auditorium, Chandrasekharpur, Bhubaneswar, on 24th October, 2025. Shri Narendra Modi, Hon'ble Prime Minister addressed virtually in the august presence of the Chief Guest, Shri Jual Oram, Hon'ble Minister of Tribal Affairs.

State Level Cyber Security Awareness Workshop Organized by NIC

A State Level Cyber Security Awareness Workshop was organized by NIC on 27th October, 2025 at Krishi Bhawan Auditorium, Bhubaneswar. The event witnessed participation from over 200 officers representing various departments of Government of Odisha, as well as NIC Centres from Delhi, Odisha, West Bengal, Bihar, Jharkhand and Chhattisgarh.

Shri Vinaytosh Mishra, Director General of Police, CID, CB, Odisha, graced the occasion as Chief Guest. He shed light on emerging threats such as cyber fraud, cybercrime, digital arrest and personal data breaches, while emphasizing the critical role of cyber police in combating these challenges.

Smt. Litti Patnaik, Additional Director, Dept. of Agriculture, attended the event as Guest of Honour and spoke extensively on data security at the government level. Delivering the welcome address, Dr. Ashok Kumar Hota, Deputy Director General and SIO, outlined the objectives of the workshop. A Brochure on "Cyber Security in the Age of Artificial Intelligence" was unveiled by the dignitaries.

Shri Ch. Bijoy Kumar Das, DDG and Head, National Infrastructure Unit (NIU), Bhubaneswar, in his vote of thanks, highlighted the advanced technical capabilities and services offered by the data centre.

The workshop featured eight technical sessions covering diverse aspects of cyber security. The sessions were conducted by eminent experts including Shri Akshay Kumar Nayak, ACP, Crime Branch, Shri Pradeep Kumar Kaushal, Senior Director (IT), NIC, New Delhi; Smt. Sujata Das and Shri Niladri Bihari Mohanty, NIC, Odisha. Cyber security experts from various industries including Netskope, Arista, Forcepoint, PaloAlto etc. interacted with the participants.

CMGI and NIC join hands to Drive AI Awareness and Innovation in Governance

A full-day workshop on Artificial Intelligence (AI) was organized by the Centre for Modernizing Government Initiative (CMGI) at Toshali Bhawan, Bhubaneswar, on 15th October, 2025 with the participation of around 100 officers and professionals from various departments. The event was inaugurated by Shri Vineet Bhardwaj, IAS, Executive Director, CMGI, who highlighted the growing significance of AI in governance and industries. He emphasized that it is not AI itself, but individuals proficient in AI, who are transforming the job landscape.

Distinguished speakers from NIC comprising Shri J. K. Mishra, GM (NICSI), Shri Rama Krishna Sahoo, Director (IT), Shri Niladri B. Mohanty, Joint Director (IT), Shri Dipak Kumar Sharma, S/T-B and Shri Lalita Mohan Pradhan, S/T-B conducted multiple sessions during the workshop. The team elaborated on the evolution of AI, demonstrated several cutting-edge AI tools such as NotebookLM, Napkin, & Gamma and provided a hands-on introduction to Prompt Engineering—the communication language for interacting effectively with AI systems.

Central Division Revenue Officers' Conference focused on citizen-centric, efficient, & technology-driven services

The Central Division Revenue Officers' Conference was organized on 18th –19th October, 2025 at the Revenue Officers Training Institute (ROTI), Gothapatana, Bhubaneswar with the objective of making revenue services more citizen-centric, efficient, and technology-driven.

The two-day conference was inaugurated by Sri Suresh Pujari, Hon'ble Minister, Revenue & Disaster Management, who underscored the importance of leveraging modern technology to enhance service delivery and simplify revenue laws. He urged officers to ensure that revenue services remain accessible, citizen-friendly, and timely.

Participating in the deliberations, Sri Jageswar Sahu, Senior Director (IT), NIC, spoke on strengthening e-Governance initiatives within the Revenue & Disaster Management Department. He outlined several new digital initiatives, including the Online Application System for Demarcation of Land by Private Individuals, designed to promote transparency and operational efficiency.

The conference was chaired by Smt. Guha Poonam Tapas Kumar, IAS, Revenue Divisional Commissioner (Central Division) and witnessed participation from 9 Additional District Magistrates (Revenue), 16 Sub-Collectors, 112 Tehsildars, 10 District Registrars, and 62 Assistant Registrars.

Spotlight

Odisha team honoured at 3rd National NeVA Conference for advancing paperless legislative initiatives

The 3rd National Conference on the National e-Vidhan Application (NeVA) was held on 30th October, 2025, in New Delhi, organized by the Ministry of Parliamentary Affairs. The event brought together over 100 participants from across the country to review progress, exchange best practices, and promote the adoption of paperless legislative processes under the NeVA initiative.

During the conference, Shri Satyabrat Rout, Secretary, Odisha Legislative Assembly (OLA), presented the status of NeVA implementation in Odisha. He was joined by Shri Ashok Rout, NeVA Coordinator, NIC, Odisha, to receive the Certificate of Honour from Dr. L. Murugan, Minister of State for Parliamentary Affairs and Information & Broadcasting, in the presence of Shri Nikunja Bihari Dhal, Secretary, Ministry of Parliamentary Affairs.

Addressing on the occasion, Abhishek Singh, Additional Secretary, MeitY and DG, NIC, also highlighted the potential of Artificial Intelligence (AI) and other emerging technologies to enhance legislative efficiency, improve data accessibility, automate routine functions, and strengthen transparency and responsiveness within legislative processes through the NeVA platform.

Seamless IT support by NIC Nuapada during preparation for Bye-Election 2025

NIC Nuapada played a pivotal role in ensuring smooth and efficient management of all IT-related activities during preparation phase for the Bye-Election 2025. Under the able leadership of Shri Vinay Kumar Tiwari, District Informatics Officer, the team meticulously prepared the comprehensive manpower database and successfully executed both phases of polling personnel randomization in the presence of Shri Prakash Bindhu, IAS, General Observer and the District Election Officer & Collector. The transparent and seamless functioning of the Polling Personnel Management System (PPMS) portal, developed by NIC Odisha, received high commendation from the General Observer.

Comprehensive training sessions were conducted for Sector Officers and District Level Master Trainers (DLMTs) on the newly introduced PRO App of the Election Commission of India, enabling accurate and efficient monitoring of voter turnout trends. During live testing, NIC Nuapada proactively monitored performance of the app, analyzed real-time data, and swiftly resolved technical issues reported. The team also ensured uninterrupted operation of key election applications such as ENCORE, Permission Module, cVIGIL, and ESMS — maintaining strict adherence to cyber security protocols laid down by the Election Commission of India.

Photo Story

Dr. Ajoy Ketan Sarangi, Sr. Director (IT) and Head (Training), NIC, Odisha addressed at National Level three Days Sensitization Workshop on "Cybercrime and Digital Arrest: Steering Law and Technology towards Online Safety" organized by Maharaja Sriram Chandra Bhanja Deo University (MSCBU), Baripada, Mayurbhanj, Odisha.

Sri Kandra Hembram, DIO, NIC, Sundargarh joined as Guest of Honour at three days long Youth Leadership Development programme organized by Municipal College, Rourkela in collaboration with the NSS Bureau, Sambalpur University.

Officers from NIC, Odisha joined at MDP on "Project Management" organised at IIM, Kozhikode.

Shri Prasanta Kumar Nayak, Senior Director (IT) along with Shri Aditya Raghav (SO/ Engineer-SB), addressed at the Five-Day In-Service Training Course on Road Safety Management organized at the Biju Patnaik State Police Academy, Bhubaneswar on 31st Oct 2025.

Publications

Brochure on **"Cyber Security in the Age of Artificial Intelligence"** released on 27th October 2025 during State Level Cyber Security Awareness Workshop

Scan the QR code to access the brochure

Tech Talk

Federated Learning: Learning together, without sharing our secrets

Federated Learning is a decentralized approach to machine learning where multiple devices or servers collaboratively train a shared model without exchanging their raw data.

Instead of sending data to a central server, each participant (called a client) trains the model locally on its data and sends only the model updates (gradients or weights) back to the central server. The server aggregates these updates to improve the global model. So, data stays where it's generated, ensuring privacy and compliance with data protection regulations.

It operates in three main forms:

1. Horizontal FL, where clients share similar features but different samples (e.g., hospitals with similar patient data structures);
2. Vertical FL, where clients share users but have different features (e.g., banks and e-commerce);
3. Federated Transfer Learning, used when both users and features differ.

The key advantage of FL is privacy—sensitive data never leaves the source device, ensuring compliance with privacy laws such as India's DPDP Act. and EU's GDPR. It also enhances scalability, personalization, and real-time learning across distributed networks like smartphones or IoT devices. However, challenges include data and system heterogeneity, communication overhead, and model security risks.

To safeguard privacy, federated learning integrates techniques like Differential Privacy, Secure Aggregation, and conceptually Homomorphic Encryption. These ensure model updates remain confidential and tamper-resistant. Real-world applications include healthcare collaborations for disease prediction, financial fraud detection, smart city surveillance systems, and mobile keyboard suggestions like Google's Gboard. Frameworks such as TensorFlow Federated, PySyft, and Flower simplify the implementation of FL across platforms. In the era of data protection and ethical AI, Federated Learning represents a paradigm shift—enabling intelligence to grow collectively while respecting individual privacy.

It bridges the gap between data utility and data security, marking the foundation of responsible, decentralized AI systems for governments and enterprises alike. As data privacy becomes legally and ethically mandatory, Federated Learning will become a default architecture for machine learning in government and enterprise ecosystems.

Contributed by: Shri Aditya Raghav, S.O / Engr-SB

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...as you grow you will understand that implementation of manipulated intelligence, that is not your own, though unethical, is not illegal...

NIC Panorama

NIC Odisha joins "Run and Ride for Unity" promoting fitness and the message of oneness

Officers from NIC, Odisha actively participated in the Fit India Movement by joining the "Run and Ride for Unity" event organized by Sri Sathya Sai Seva Organisations, Odisha. The event was flagged off by the veteran film actor Sri Ashrumochan Mohanty.

Around 1,800 participants enthusiastically took part in the 3 km, 5 km, and 10 km runs, as well as in the cycling events. All participants received T-shirts, medals and refreshments.

During the valedictory session, Dr. A. K. Hota, DDG & SIO, joining as Guest of Honour, highlighted that the purpose of the event was to spread the message of One Language, One Religion, One Caste, and One God, emphasizing the unity and omnipresence of the Divine.

महीने के हिन्दी शब्द

• Prospectus	: विवरण पुस्तिका	• Gross negligence	: घोर लापरवाही
• Post facto sanction	: कार्योत्तर मंजूरी	• Classification	: वर्गीकरण
• Standing order	: स्थाई आदेश	• Tour advance	: दौरा अग्रिम
• Acquittance roll	: भुगतान पंजी	• Sanction order	: स्वीकृति आदेश

IT by Tea

Edge AI: Bringing Intelligence Closer to Action

Edge AI combines artificial intelligence (AI) with edge computing, enabling data to be processed directly on local devices — such as sensors, cameras, drones, or smartphones — rather than relying solely on centralized cloud servers.

Myth:
"Edge AI is just cloud AI running on smaller, local devices." Many believe Edge AI is merely a scaled-down version of cloud-based AI, performing identical tasks but on limited local hardware.

Truth:
Edge AI is not a smaller cloud AI — it's a complementary approach designed for speed, privacy and autonomy. By processing data near its source, Edge AI enables instant decision-making, keeps sensitive data local and secure, and reduces bandwidth consumption and operational costs.

Powered by efficient hardware platforms like NVIDIA Jetson and Google Coral, Edge AI delivers impressive performance with minimal power usage. Together, Edge AI and Cloud AI form a balanced ecosystem that combines local responsiveness with centralized intelligence.

Contributed by: Shri Abhishek Singh, DIO, Angul