

iBRIC (Institutions of Biotechnology Research Innovation Council) joined eOffice platform

On 1st May, 2024 eOffice implementation at iBRIC across India having 16 different institutes was started in full swing in presence of all Directors of the institutes. BRIC is an autonomous society under DBT (Directorate of Bio-Technology), Ministry of Science & Technology, Govt. of India.

Earlier the kick-off meeting was held on 1st April 2024 in the presence of Dr. Rajesh S Gokhale, Director General & Secretary of BRIC, all Directors of DBTs and Smt. Rachna Srivastav, DDG, NIC, New Delhi.

NIC Odisha team headed by Sri S. N. Behera, Scientist-F with support of eOffice team NIC, Hqrs coordinated with all nodal officers of institutes for PIMS Data, File Head data collection, server allocation, deployment of manpower at all locations, implementation of eSign, migration of existing data of NABI (National Agri Food Biotechnology Institute) Mohali from SDC Punjab, creation of email ids for all employees, aliasing of existing ids etc. within a short span of time. Four online and three offline training sessions were organised for Master trainers and for 1294 users of BRIC.



Advancing Healthcare: Exploring AI's Impact and Opportunities

The Directorate of Health Services hosted a lecture on 17th May, 2024 on future of healthcare highlighting the transformative role of Artificial Intelligence (AI).

Shri Niladri Bihari Mohanty, Scientist-D from NIC was invited to deliver this insightful session. The audience composing of senior doctors from various Government Hospitals gained a comprehensive understanding of AI and machine learning (ML) fundamentals as Mr. Mohanty explained their evolution into deep learning and how biological concepts of neurons have inspired the development of artificial neural networks into deep neural networks. The presence of the Dr. Kasinath Nayak, Director of the Directorate of Health Services underscored importance of the event.



Generative AI Session empowers students at IITM, Bhubaneswar

Indian Institute of Tourism and Travel Management (IITM), an autonomous body under the Ministry of Tourism, Government of India is one of the premier institute in the country offering education, training, research and consultancy in sustainable management of tourism, travel and other allied sectors.

NIC, Bhubaneswar led by Smt. Sujata Das, Scientist-F and Sri Lalit Mohan Pradhan, Scientific-T.A (A) conducted a session on Generative AI at IITM, Bhubaneswar on 3rd May, 2024.

The session covered AI fundamentals, its history and application in tourism. Practical demonstrations on various GenAI tools including logo creation, website design, creating chatbot as a customer assistant, creating advertising content in tourism and sentiment analysis equipped students with valuable skills. The comprehensive coverage of Generative AI's applications in tourism enhancing industry-relevant education and fostering innovation was well appreciated.



Resonance



SATHI: Pioneering Seed Security and Sustainability - A Global Vision Unveiled

On 14th May, 2024 a Vietnamese delegation team led by Major General Duong Van Tinh, Director General of the Department of Information Technology, visited NIC HQ. Accompanied by embassy officials Dr. Nguyen Thi Thanh Xuan and Mr. Vu Duc Ngoc along with Mrs. Aarsha N.S from the Ministry of External Affairs the delegation team explored India's eGovernance initiatives. Dr. R. K. Pathak, DDG welcomed the guests followed by presentation on the project SATHI (Seed Authentication Traceability & Holistic Inventory) by Shri Dinesh Chandra, Sr. Director (IT) highlighting its impact on forming a national seed grid and its potential to make India a global seed hub. He detailed various modules of SATHI, its configurability to meet requirements of federal structure of the states and its alignment with Indian minimum seed certification standards. Shri Chandra also explained how SATHI enables tracking of each seed bag using QR Code, aiding in maintaining a healthy supply chain and connecting all stakeholders in one umbrella. The event concluded with a vote of thanks by Shri. Anand Srivastava, Sr. Director (IT) and Shri. Vaibhav Agrawal Sr. Director (IT).



Counting Personnel Management System (CPMS):

The counting of votes through a transparent process is a crucial part of election process. CPMS is used to allocate manpower for election vote counting through a three-stage randomization process as per Election Commission of India (ECI) guidelines. This online system facilitates District Election Officers (DEOs) and Returning Officers (ROs) in setting up counting tables for Electronic Voting Machines (EVMs), Electronically Transmitted Postal Ballot System (ETPBS) and Postal Ballots generating necessary queries and reports for all levels of users including General Observers, ROs, and DEOs. Data generated from this counting process is fed and processed at ENCORE application to publish AC and AS wise poll results.



Sambalpur

Police Personnel Randomization:

Police personnel randomization is used to allocate police personnel to booth locations through a randomization process based on guidelines of ECI. As per the location of polling stations in a specific location and nature of the polling stations scale of deployment of police personnel are decided by CEO and SPNO. Deployment of police personnel is carried out in 2 states as per the guidelines of ECI and CEO. Randomization was carried out centrally by the State Police Nodal Officer (SPNO) and the confidential booth allotment report was handed over to concerned Superintendents of Police (SP) at the district level by the District Informatics Officer (DIO).



Sundargarh

Poll Day Voter Turnout Monitoring:

The ENCORE application developed by ECI is a dedicated technology platform that records voter turnout every two hours for each Assembly Constituency/Segment on the day of the poll starting from 9AM. The data captured is compared with Form-17 C to declare the voter turnout of the district.



Keonjhar

Odisha Election Vehicle Tracking System (OEVTs):

The OEVTs Mobile App developed in collaboration with NIC and ORSAC enables live tracking of the movement of vehicles carrying polling parties, movement of Sector Officers, FST and SST through GEO-tagging. The dashboard at different levels like RO, DEO, CEO ensures real-time monitoring and analysis. After 3rd randomisation of polling parties data is migrated from PPMS to OEVTs application.



Boudh

Booth Information System & Control Room Monitoring:

This web application allows polling parties to access their booth allotment details along with information about other polling officers, BLOs, Sector Officers and BDOs. After the third randomization, the data was published on the portal for convenience of polling parties to avoid rush at the counters. This application facilitates quick dispersal of polling parties and enables the concerned officers to be contacted immediately in case of issues such as EVM malfunction or law and order situations. It also acted as a grievance redressal system in the control room on the poll day.



Khordha

All the above applications were used by DEOs and ROs at different stages of the election process. In all districts, DIOs provided support to DEOs, ROs, AROs, Sector Officers, Micro Observers and SPs in application configuration, data management, training, hand-holding, and coordination among different implementing agencies to ensure free and fair elections.



Jajpur



Jharsuguda

NIC Odisha recently hosted an innovative three-day seminar, aptly named "The 3D Tech Talk," to encapsulate 3-dimensional perspectives of emerging technologies. Held from 6th to 8th May, 2024, the event featured three distinct themes: Industrial Internet of Things (IIOT), Cyber Security, and Artificial Intelligence/Machine Learning (AI/ML). Each day saw a deep dive into these cutting-edge topics chaired by renowned external domain experts. Dr. Abhay Kumar Samal, Dean of the School of Computing & Dean of Project & Consultancy inaugurated the series with a session on IIOT. This was followed by Shri Siddharth Pattnayak, CSIO of IServeU, who delved into the intricacies of Cyber Security. The final day was graced by Shri Shashanka Sekhar Choudhury, Ex-CTO of OSDA, who illuminated the advancements and applications of AI/ML.

In these seminars NIC Officers have presented various topics ranging from Industry 4.0 to LoRA WAN, from Evolution of AI to Generative Adversarial Network, from Enterprise Security to Honeypot technologies. The fusion of expert insights and skill-building made "The 3D Tech Talk" a landmark event fostering a rich exchange of ideas and promoting technological proficiency within the organization.



**Workshop on WhatsApp API integration:
fostering a more connected and responsive digital ecosystem**

NIC Odisha is integrating WhatsApp into its web applications through CPaaS (Communications Platform as a Service). This strategic move aims to leverage robust communication capabilities of WhatsApp to facilitate enhanced interactions with users. By utilizing CPaaS, NIC Odisha ensures efficient, scalable and reliable communication channels, thereby improving user engagement and accessibility. This integration is expected to streamline processes, provide real-time updates and foster a more connected and responsive digital ecosystem for users across the state.

Towards this, a workshop was organised with detailed deliberations on WhatsApp integration, API configuration, chatbot platforms and use cases. Brainstorming sessions were held on exploring applications such as e-Panchayat Sabha, ServicePlus, PM POSHAN, disaster notifications etc. for implementing the same.



NIC, Odisha organised the 'Tech-Expo 2024' on 9th May, 2024. This event showcased twenty diverse technologies developed by the developer workforce of NIC under the mentorship of NIC officers. The guest of honor for the event was Shri. Ananta Rao, former CGM (IT) of Odisha Power Transmission Corporation Limited (OPTCL).

The expo featured an impressive array of technological innovations from various fields. Highlights included an open-source framework for self-driving cars demonstrating the latest advancements in autonomous vehicle technology. Also on display were handmade tranceiver nodes utilizing LoRA technology for long-range communication, applications of the ZigBee wireless communication protocol and a demo application based on augmented and virtual reality (AR/VR).

Other notable presentations included smart TV app development, showcasing innovations in creating applications for smart TVs and BigchainDB, a blockchain-based database technology. MindsDB was also featured demonstrating databases enhanced with artificial intelligence capabilities. The expo explored quantum computing through IBM's Qiskit platform and highlighted Internet of Things (IoT) applications using Raspberry Pi, Node MCU and Arduino.

The technologies behind unmanned aerial vehicles (UAVs) and drones were examined along with advancements in serverless computing architecture. An indoor positioning system was demonstrated for indoor navigation and positioning and processors based on the RISC-V architecture. Specifically Shakti and Vega were showcased. The event also highlighted robotic process automation (RPA) technologies, innovations in 3D printing and new developments in space exploration technology.





Clouds in Deep Space: Reducing CAPEX in Space Sector

In 2021, India has opened its space industry to the private sector encouraging innovation and investment by allowing private companies to build and launch their own space programs. But the space industry is CAPEX-intensive and highly risky due to the substantial upfront investments required for R&D, coupled with the inherent uncertainties of space missions.

Cloud computing is a cost-cutting technology that transforms heavy CAPEX projects into OPEX-oriented models reducing upfront investments and spreading costs over time. This shift enables small players to compete on a level playing field with established companies by providing affordable access to advanced computing resources. As a result, innovation in space technology becomes more inclusive and widespread, fostering greater competition and technological advancement.

Azure Orbital Ground Station as a Service



Microsoft Azure Orbital's Ground Station as a Service helps the space industry by providing on-demand access to satellite data without the need for substantial infrastructure investments. This service enables faster and more cost-effective satellite operations allowing companies to focus on innovation and mission objectives rather than logistical challenges.

- Self-service scheduling of spacecraft contacts to ingest data, monitor satellite health and status, or transmit commands to satellites.
- The managed data path provides one-click access to a global network of ground stations and direct data ingestion into your private Azure virtual network.
- Take advantage of integrated software modems from Kratos for X and S bands, or leverage virtual RF and GNU radio for unrestricted modem implementations.
- Avoid building and managing ground station infrastructure and instead pay-as-you-go with any antenna in the global Azure Orbital network.
- Space data are transmitted and managed securely according to stringent compliance requirements.
- Integrate command and control software with the Azure Orbital Ground Station API to manage fleet operations.

TOONIC

“IT by Tea, XT, all T...any T... progress ought to come... this day I am proud of my Forefinger...”



2024

Sharing Liquid Love: Tribute on the birthday of a visionary technocrat

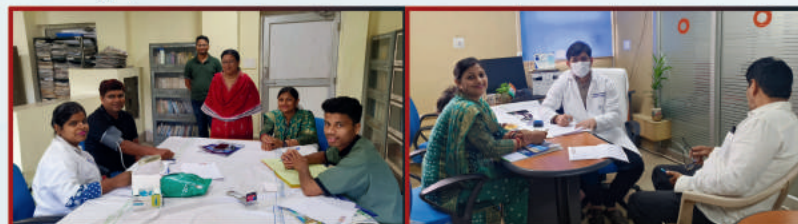
The birthday of Padma Bhushan Dr. N. Seshagiri, Founder Director General of NIC was celebrated on 10th May, 2024 with a Blood Donation Camp. It was organised with coordination of Shri Sathya Sai Seva Sangathana, Odisha under the supervision of Doctors and Staff from Indian Red Cross, Odisha Branch. 67 units of blood were collected in the camp. Shri Bibhuti Bhushan Patnaik, IAS, Secretary, Indian Red Cross, Odisha and Dr. Raghunath Behera, Medical Officer, Indian Red Cross graced the occasion. Certificates and Token of Love were distributed to the donors.



Prior to this an awareness-cum-inspirational talk was held on 8th May, 2024 in which the status of blood availability in the country, benefits of blood donation, do's and don'ts during the process and all other aspects were discussed and deliberated by Shri Pradipta Kumar Tripathy, Vice-President of Indian Blood Donors' Federation.



A Health Chek-up Camp was organised with the help of Dr. Gyanendra Sathua Mahapatra and staff from SUM Ultimate Medicare, Bhubaneswar. All the employees availed the benefits like vital measurements including BP and Blood Sugar, ECG and Doctor's consultation.



IT by Tea



In the digital landscape, where changes are swift and constant, the misconceptions surrounding UI (User Interface) and UX (User Experience) design seem to persist steadfastly.

Myth:

- a) UI/UX design is solely about beautifying a website or app. b) Good Design Means Adding More Features.

Truth:

- a) More than just enhancing visual appeal, UI/UX design integrates crucial components such as user research, content strategy, and information architecture. These elements work synergistically to create digital platforms that resonate deeply with the target audience, thus fostering a heightened level of user satisfaction and engagement.
- b) In contrast, adopting a “minimalistic approach in UI/UX design” often proves more fruitful. A bombardment of features can lead to a chaotic user interface, dissuading users. A streamlined and focused feature set, conversely, can significantly amplify user experience and engagement.