



An e-Governance Newsletter of
NIC RAJASTHAN

Quarterly Digital Newsletter (From JANUARY to MARCH 2023)

Our Heritage



RANTHAMBORE NATIONAL PARK

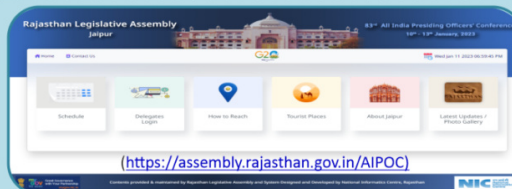
Ranthambore National Park is one of the world's best known tiger reserve, located in the Sawai Madhopur district of south east Rajasthan. In the vicinity of the Aravali hills and Vindhya plateau, the Ranthambore forest spreads over an area of 1334 sq km including 392 sq km area of the national park. Ranthambore offers some of the finest opportunities for sighting the magnificent tiger in the wild. A mix of rolling hills, crags, meadows, lakes and rivulets, this dry-deciduous forest is home to an incredible variety of flora and fauna. Apart from the tiger, you can also spot sloth bear, leopard, caracal, jackal, fox, hyena and mongoose. The elusive Indian wolf too, has been spotted here occasionally. The chital, sambhar deer, nilgai, rhesus macaque, langur and an incredible variety of birds in amidst of dhok, fig and banyan trees makes a visit to this park a delight. The jungle safari timings in Ranthambore National Park for both the entry and exit varies according to the season. Normally, the morning jungle safaris are conducted from 7:00 AM to 10:30 AM, while the evening jungle safaris are conducted from 2:30 PM to 6:00 PM.

To reach Ranthambore, the Jaipur airport is the nearest and is located 150-170 kilometers away. By Road, It is just 12 km away from Sawai Madhopur city, which is well connected with all the major cities through Govt. or private bus services and taxis. One can easily get regular trains to Sawai Madhopur from other major cities of the country. Due to tourist crowd, it is advisable to make reservations in advance. For online reservations, visit below link -

<https://fmdss.forest.rajabsthan.gov.in>

Events / Happenings

All India Presiding Officers Conference in Rajasthan



The 83rd all India presiding officers conference has been organized at Rajasthan Legislative Assembly, Jaipur on 11th-12th January 2023. Prior to this, a conference of secretaries of legislative bodies was held on 10th January 2023 at Jaipur. NIC Rajasthan provided technical support for the conference under guidance of Shri Jitendra Kumar Verma, SIO, Rajasthan. A registration portal developed to facilitate dignitaries of Rajya Sabha, Lok Sabha, all Legislative Assemblies and Councils to register online for participating in the Presiding Officers' Conference and Conference of Secretaries of Legislative Bodies. The portal has been developed keeping in mind the requirements of legislatures and dissemination of information to all the stakeholders on real time basis. The Portal provides the details of dignitaries, their journey, allotted vehicle, hotel accommodation, Liaison Officer's duty, PSO duty & various other details to all the stakeholders and organizing body of Rajasthan Legislative Assembly. This application is device agnostic which runs on desktop, laptop, iPad and smart phone. A dashboard has been developed for quick and easy access of all the information at a glance, which is used by the Rajasthan government, media persons and hoteliers and duty staff. NIC Video conferencing facility provided from the central hall of assembly with NIC facilitated Wi-Fi to all dignitaries. Live streaming of the events was done on assembly YouTube channel and the feed was provided to Akashwani, Jaipur.

Rajasthan IT Day 2023 Organized



Hon'ble CM Rajasthan interacting with State Coordinator and NIC Team

A three-day IT Day 2023 was organized by Government of Rajasthan, from 19th-21st March 2023 at the Commerce College, Rajasthan College and Jawahar Kala Kendra Jaipur. NIC showcased a wide variety of its Projects at the expo with live demo of the projects shown to Hon'ble CM of Rajasthan and was appreciated by him. Hon'ble CM also interacted at NIC DILRMP, e-Panjiyan, e-Transport and e-Prison Stall. The projects especially showcased at the stalls were DILRMP, ePanjiyan, Social Security Pension, Pehchan, Vahan, Sarathi and e-Challan, Shala Darpan, IFMS Budget, ePrisons and others. The Chief Secretary Rajasthan, ACS IT, Commissioner IT, NIC state coordinator, Shri Yogender Kumar(DDG) and other dignitaries visited the NIC stalls at the expo and appreciated the efforts of NIC Rajasthan. Shri Ashok Kumar Lodha, DIO Chittorgarh and Shri Prahlad Kumar Jat, Scientist-D received awards at the IT Day.



State Coordinator, SIO & NIC Team



NIC Team at IT Day



NIC Team with the visitors

Visit of Rajasthan State Coordinator to Jaipur



State Coordinator Welcomed by SIO Rajasthan and Interacted with State & District officials through VC



State Coordinator and SIO Rajasthan at IT Day and Rajasthan Legislative Assembly

Rajasthan State Coordinator Shri Yogender Kumar, DDG, NIC Delhi visited Jaipur and participated in various events and meetings from 20th-21st March 2023. SIO, Rajasthan, Shri Jitendra Kumar Verma welcomed the State Coordinator and briefed about the NIC activities. He interacted with all state unit officials and districts officials, connected through video conferencing. State Coordinator was introduced to the major projects of NIC like Integrated Financial Management System(IFMS), Pension, Social Security Pension, DILRMP, ePanjiyan, Pehchan, NICCI Chatbot, Shaladarpan, PHED, Rural Development, RERC etc. along with network infrastructure available in the state and support provided to SDC. SIO informed that NIC Rajasthan is working with major departments of state government for the digitization of their systems. All senior officers of state centre explained about the projects being undertaken by them and the citizen/government facilities available on the portal in brief. ASIO state, Shri Naresh Gupta apprised about the NKN project and data centre resources available in Rajasthan. Udaipur, Jodhpur, Kota and Shri Ganganagar districts informed about the projects being developed and implemented in their districts. ASIOs Districts - Shri Prasoon Jain and Shri B.S. Chauhan apprised about the district activities in the state. State coordinator interacted with the senior officials of NIC state centre and held one to one discussions about the status and problem faced in the execution of projects. State Coordinator visited Integrated Financial Management System(IFMS) project site and reviewed the project. Also held meeting with NIC team members about status and progress being made in the project. State Coordinator visited Rajasthan IT day at Commerce College Jaipur where various NIC projects are being showcased. He interacted with the NIC project team of DILRMP, Pehchan, ePanjiyan, IFMS, Shaladarpan, eTransport, ePrison etc. He also interacted with Hon'ble Chief Minister, Shri Ashok Gehlot during his visit to NIC projects stall and other senior officials of Rajasthan government. He has visited Rajasthan Legislative Assembly during the inauguration of "Hamare Vidhyak" system developed by NIC Rajasthan. Hon'ble Governor of Assam inaugurated system in presence of Hon'ble Chief Minister of Rajasthan and other VIPs.



Events / Happenings

Participation in "Alluring Rajasthan" Exhibition at Udaipur



Award for best ICT Stall

NIC participated in a three days, mega exhibition "Alluring Rajasthan" held at Udaipur from 23rd-25th February 2023. The exhibition "Alluring Rajasthan" is an initiative which focuses on highlighting government schemes, programs and all the developments undertaken to resolve the national concerns. It focuses on distributing knowledge among the people of Rajasthan regarding various opportunities and innovations. Under the hood of 75th Azadi Ka Amrit Mohotsav, the epicenter of the event is to highlight the segments which will be helpful for the youth, general public, education providers and decision makers. NIC participated in the exhibition by demonstrating various services offered by the organization for the common citizens.



NIC Stall at the Exhibition

NIC stall was decorated with flexes on all sides of stall wall having number of major services displayed on it. For live interaction a 40" LED wall was running smoothly having various movies, pictures and presentations. More than 250 students from different schools/colleges/institutes visited NIC stall and they were briefed regarding various activities of NIC & Government e-services by three senior officers - Sh Mazher Hussain (DIO Udaipur), Sh Vipin Khanna (Scientist-F, Dungarpur) and Sh Hemant Mehta (DIO Banswara). Visitors were briefed about following major application - Digilocker, e-hospital, Digital cashless & UPI payments, e-panchayat, Jeevan Praman, Vahan & Sarthi, Video Conferencing, Government Land, NICNET Data Centers, NKN, Webcasting etc. SIO Rajasthan, Sh Jitendra Kumar Verma, ASIO Sh Prasoon Jain along with Sh Chanden Sen Scientist-F, coordinated and provided guidance for establishing NIC Stall at the exhibition. The exhibition "Alluring Rajasthan" received a huge acclamation and was organised by Prayas Exhibitors - a group of young, dynamic & professional event organizers who have an extremely successful track-record of organizing exhibitions & global business summits which have proved highly beneficial for the public.

Technical Support for "G20 Employment Working Group" Meet at Jodhpur

Under India's presidency first G20 Employment Working Group Meet was organized at Jodhpur from 2nd-4th February 2023. District Administration entrusted NIC with the task of technical support at event venues (Taj Hari Hotel and Hotel Indana) for smooth conduct of the special event. NIC team comprises of Shri Jitendra Kumar Verma (SIO NIC Rajasthan), Shri Jaideep Walia (NIC Delhi), Shri Ravi Mathur (Scientist-F/DIO NIC Jodhpur) and Shri Vikas Agarwal (Scientist-E/ADIO, NIC Jodhpur) made all the technical arrangements for the smooth functioning of the event. The event was conducted successfully and technical arrangements were appreciated at all levels.



Swachhata Pakhwada Organized at NIC Rajasthan



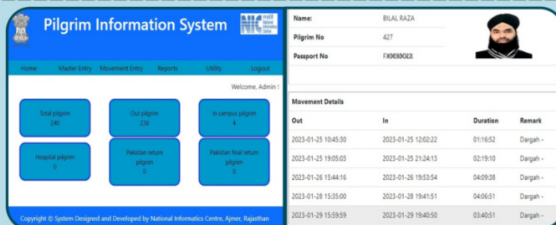
Swachhata Pakhwada was organized at NIC Rajasthan from the 1st-15th February 2023. The Swachhata Pledge was taken by all the staffs and officers of NIC Rajasthan administered by DG NIC along with the district centres and NIC project offices. Cleanliness activities were taken up by the NIC officials every day as per the action plan. Extensive cleaning activities were held at the NIC offices, Project offices and the District Centres by NIC officers and the supporting staffs as per the action plan. During the fortnight, various activities of cleanliness undertaken includes - cleaning of the office premises, dusting, cleaning furniture, de-weeding of files and papers, clearance of garbage from computers and phone etc. Special emphasis were laid down on the cleaning of the water reservoir presents in the offices during the Pakhwada. Computer systems, files, furniture, shelves, entrance etc were cleaned during the Pakhwada. The officer's also attended the session on "Solid & Liquid Waste Management and the importance/necessity of General Cleanliness" through VC. In the closing session, a presentation on "E-waste Management" was given by Dr. S.C. Gupta, Scientist-F with all the 33 District NIC offices and user sites were also connected through Video Conferencing. Shri Jitendra Kumar Verma, SIO Rajasthan, stressed the need for Swachhata and said that "All of us should put in best efforts to keep our surroundings and self clean". Sh. Naresh Gupta ASIO (State) thanked all the officers and staffs for their whole hearted participation in the Swachhata Pakhwada.

"Hamare Vidhayak" Inauguration in Rajasthan Legislative Assembly

The "Hamare Vidhayak" System has been inaugurated in the House of Rajasthan Legislative Assembly, Jaipur on 20th March 2023 by Hon'ble Governor, Assam Shri Gulab Chand Kataria in the presence of Hon'ble Speaker Dr. C.P. Joshi, Hon'ble CM Rajasthan Shri Ashok Gehlot and other dignitaries. NIC Rajasthan has developed software under guidance of Shri Jitendra Kumar Verma, SIO Rajasthan. Shri Yogender Kumar, State Coordinator Rajasthan & DDG, NIC (HQ) & SIO, Rajasthan were present in the House of Assembly during the inaugural function. Software facilitates to members, government departments, media persons, research scholars and common citizen etc. to get complete information of any elected member of Rajasthan since 1952 with the details of their constituency, party, house no., council of ministers, committee member/chairman, Rajya Sabha/Lok Sabha membership etc. NIC Rajasthan has developed many ICT enabled initiatives in the Rajasthan Legislative Assembly like online questions, motions, house proceedings etc. on web portal and Mobile App, which have been appreciated in Rajasthan and other states. Many other Assembly officials have also visited Rajasthan Assembly to study these initiatives to replicate in their Assembly.



Web based Software for Ajmer Urs Fair 2023



The District Collector Ajmer and Addl. SP (CID) requested NIC district centre, Ajmer to develop software for monitoring the IN/Out movements of Pakistani pilgrims during the Urs fair-2023. The Urs Fair was Organized from 25th January to 1st February 2023 at Ajmer. About 250 Pakistani pilgrims visited Ajmer on 25th January 2023 to attend Urs fair 2023 and were stayed at Central Girls School, Ajmer till 1st February 2023. NIC Ajmer developed web based software as per the requirement with deployment of necessary infrastructure along with monitoring, training and technical support, provided to the CID office, Ajmer. The web based software have functionalities like - Dashboard for at a glance, monitoring, Data entry, update and data import facility of pilgrims with In/out marking, Database backup and restore facility along with various types of reports as per requirement of CID office. Moreover, coordinated and provided technical support for data entry of C form of Pakistani pilgrims. The role of NIC Ajmer was appreciated with successful movements tracking of Pakistani pilgrims.

CYBER SECURITY TIP

Be Careful What you Click

"Avoid visiting unknown websites or downloading software from untrusted sources. These sites often host malware that will automatically install (often silently) and may compromise your computer."



Quarterly Digital Newsletter (From JANUARY to MARCH 2023)

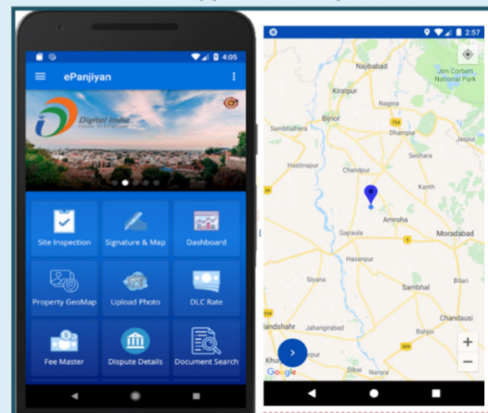
Project of the Quarter - ePanjiyan

ePanjiyan is a comprehensive software solution for document registration process of Registration and Stamps Department under Finance Department, Government of Rajasthan. Objective of ePanjiyan is to provide user friendly, transparent, fast and convenient services for document registration. It provides very user friendly and simple way of calculation of stamp duty and registration fee for citizens and online facilities for Registration & Stamps Department for almost all important activities like DIG case hearings and recording decisions, monitoring at Deputy Inspector General, Stamps & Registration (DIG) & Inspector General, Stamps & Registration (IG) levels etc.

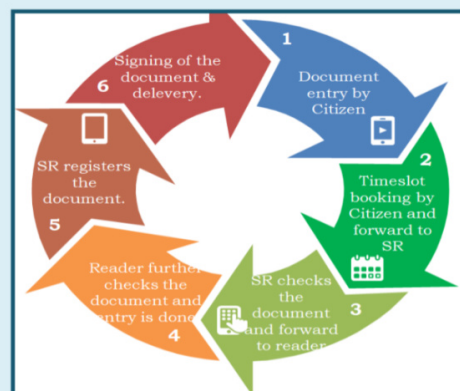
Details about ePanjiyan Project -

- ePanjiyan is rolled out in all 600 Sub Registrar offices (SR), 17 DIG offices for online cases, SR monitoring & various approval activities including DLC and IG office. Successfully working for more than eight years.
- Computerization of activities for SR, DIG, IG, and Secretary Finance (Revenue)
- Mobile App for online site inspection at all Sub Registrar office and IG Dashboard.
- More than 78 Lakh documents registered and more than Rs 25,000 Crore government revenue collected.
- Online Mutation Process in LRC (e-Dharti) for Registration or (Land Transaction) by sale deed of agriculture land at ePanjiyan Portal. After online data verification through API, it generates auto mutation number.
- Online Refund Module for unused citizen revenue fees will enable 'faceless and paperless refund' and reduce service delivery time from 6 months to 48 hour.
- Registered records safety achieved by preserving the documents through scanning.
- Stop loss of government revenue, incorrect document registration and also reduces litigation cases.
- More than 3000 refund applications processed online.
- More than 10 Lakh site inspections done.
- More than 43 thousand cases processed at Deputy Inspector General (DIG) level.
- 367 Sub Registrar offices integrated with LRC for Auto-Mutation.
- More than 3,00,000 auto-mutation cases processed.
- Integration with, IFMS (eGras & paymanager), SHCIL, RIPS (Scheme of Industries department, GoR. Departments).
- Workflow based DLC management system for DLC rate entry, update and approval facility.
- Decision of DIG Cases available in public domain, showing the cases report which are decided by the DIG.
- Time slot booking facility available at 55 Sub Registrar offices.

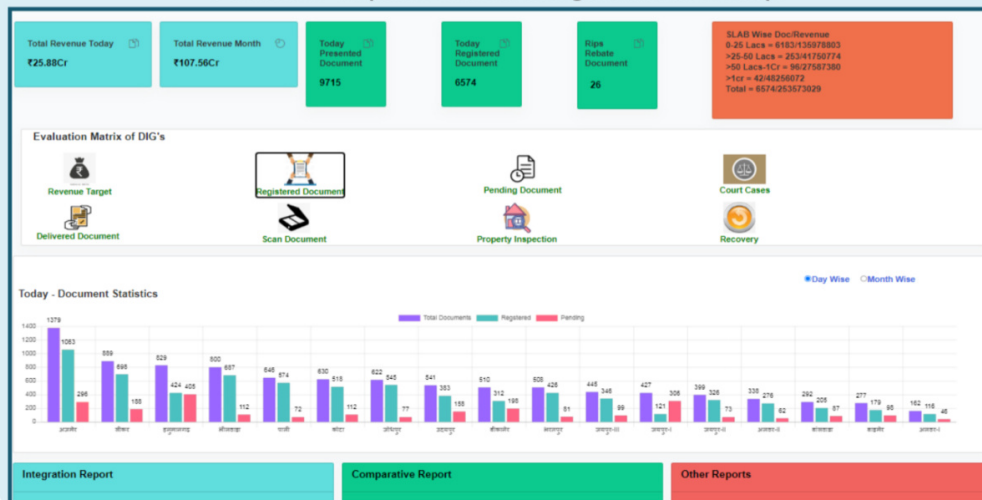
Mobile App for Site Inspection



Registration Process



Dashboard - Inspector General of Registration and Stamps



Facilities on ePanjiyan Application for Citizens are:

- Online DLC rates.
- Online Property Valuation.
- Online submission of Property details, Party details and Payment details.
- Online refund facility.
- Online time slot booking.
- Integration with Land Record for Auto-mutation
- SMS at various stages.
- Document search facility.
- Anywhere registration facility at selected SR Offices.
- Online and Offline payment modes for paying Stamp duty and registration fees by eGRAS, Stock Holding Corporation of India Ltd (SHCIL), Physical stamp etc.

Awards / Accolades



Shri Ashok Kumar Lodha, DIO (Chittorgarh) & Scientist-E, received e-Gov Rajasthan Award 2021-22 for Aarogya Sathi Mobile App dedicated to Citizens for blood help, ambulance help, emergency contacts and medical services.

Shri Prahlad Kumar Jat, Scientist-D, NIC State Centre, Jaipur, had received e-Gov Rajasthan Award 2021-22 for successful implementation of IFMS Budget software for Government of Rajasthan.

SIO Rajasthan, Shri Jitendra Kumar Verma and Shri Amit Agarwal, Scientist-F, received CSI (Computer Society of India), Special Interest Group (SIG) Award for Rajasthan Agriculture Statistics Portal at Delhi Technical University, Delhi. Rajasthan Agriculture Statistics portal developed by NIC for Statistics Department is an integrated system to capture various agriculture related data. The system allows the department to keep an eye on state agriculture productions and yields. The citizens get information like rainfall statistics, crop estimates etc.

The Pension department, GOR, has awarded Appreciation Certificate to Shri Yogesh Parmar, Scientist-E, for software development & implementation of e-Pension web application for all departments of Rajasthan regarding New Pension Cases.

The Commissioner and Joint Secretary, DOIT&C, GOR has awarded Appreciation Certificate to Shri Anuj Gaur, Scientist-E, for migration activity of application and portals at Rajasthan state Data Centre (RSDC), Jaipur.

Major Projects Transactions Statistics

SN	Project	January	February	March	Total Trans.
1	DBT through Pay Manager	13933714	13246361	11205174	38385249
2	DILRMP	560498	5326320	6585931	12472749
3	Shala Darpan (Students)	4968873	5364523	1736564	12069960
4	IFMS - Rajkosh Challans	1113639	1091053	1419149	3623841
5	eGras	923542	903652	1183114	3010308
6	IFMS - Rajkosh Bills	470043	486021	485932	1441996
7	PayManager - Other Bills	268190	282125	301443	851758
8	Right to education (Students)	1201984	265874	270128	1737986
9	Registration and Stamps	212519	202932	219900	635351
10	Shala Darpan (School/Teachers)	31981	32865	64521	129367
11	E-Transport Vehicle Registration	101622	97274	128652	327548
12	E-Transport Driving License	64063	57689	64842	186594

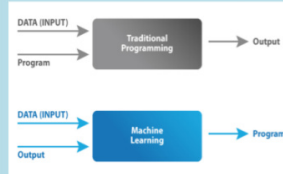


Technology Talk on Concept of Machine Learning

Machine learning (ML) is an evolving branch of Artificial Intelligence that focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy. Computational algorithms are designed to emulate human intelligence by learning from the surrounding environment. It allows computers to learn from data and make decisions or predictions without being explicitly programmed. The basic idea behind machine learning is to provide algorithms with the ability to learn from data, recognize patterns, and make decisions based on that knowledge. This is done by feeding large amounts of data into the algorithm and allowing it to identify patterns and relationships between the data points. The choice of algorithm depends on the type of data at hand and the type of activity that needs to be automated.

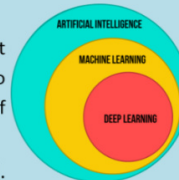


Shri Vikas Meena
ADIO & Scientist 'B' Bundi



Machine Learning is different from traditional programming. In traditional programming, we would feed the input data and a well-written and tested program into a machine to generate output. When it comes to machine learning, input data, along with the output, is fed into the machine during the learning phase, and it works out a program for itself.

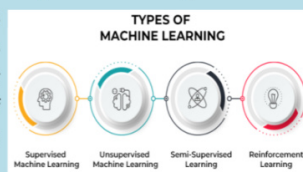
Machine learning is correlated with both AI and Deep Learning. AI is a bigger concept to create intelligent machines that can simulate human thinking capability and behaviour, whereas machine learning is a subset of AI that allows machines to learn from data without being programmed explicitly. Deep learning is a specific kind of machine learning or is a subset of



ML that highly depend on a large amount of data for good performance.

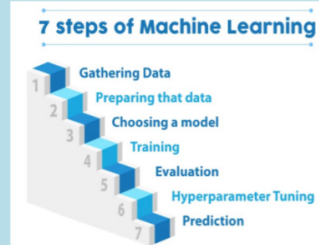
Types of Machine Learning - Supervised learning involves training a model using labelled data, which means that the data is already categorized or classified.

The model learns to identify patterns and relationships from input data and make further predictions on new data. Examples of algorithms used includes Logistic Regression, Nearest Neighbour, Naive Bayes, Decision Trees, Linear Regression, Support Vector Machines (SVM) and Neural Networks. **Unsupervised learning** involves training a model using unlabelled data. The model must find patterns and relationships in the data without any prior knowledge of what the data represents. This type of learning is useful for identifying hidden patterns and discovering new insights in large datasets. Examples of algorithms used includes Apriori algorithm and K-Means and Association Rules. **Semi-supervised Learning** type makes uses of both labelled and unlabelled data for training. Semi-supervised learning falls between unsupervised a learning and supervised learning. **Reinforcement learning** is a type of learning that involves training a model to make decisions based on feedback from its environment. The algorithm learns to maximize a reward signal for decisions that lead to positive outcomes and avoiding decisions that lead to negative outcomes.



Latest Trends in Machine Learning - Multimodal Machine Learning (MML) - Multimodal learning in machine learning is a type of learning where the model is trained to understand and work with multiple forms of input data, such as text, images, and audio. These different types of data correspond to different modalities of the world – ways in which it's experienced. **Automated Machine Learning (AutoML)** is the process of automating the tasks of applying machine learning to real-world problems. AutoML automates the time-consuming, iterative tasks of machine learning model development and its goal is to speed up the AI development process making the technology more accessible.

Embedded Machine Learning (TinyML) is a field of study in Machine Learning and Embedded Systems that explores the types of models you can run on small, low-powered devices like microcontrollers. It enables low-latency, low power and low bandwidth model inference at edge devices. The "OK Google", "Alexa" and "Hey Siri" are an example of TinyML.



Machine Learning and Cybersecurity - Effective cybersecurity can be achieved using machine learning techniques. With machine learning, cybersecurity systems can analyse patterns and learn from them to help prevent similar attacks and respond to changing behavior. It can help cybersecurity teams be more proactive in preventing threats and responding to active attacks in real time. **Machine learning is the core of some companies' business models.** Companies are using machine learning in several ways, that includes - algorithms of Netflix or YouTube, image analysis and object detection, fraud detection, automatic helplines or chatbots, self-driving cars, medical imaging and diagnostics etc. Thus, Machine learning is a powerful tool that allows computers to learn from data and make decisions or predictions based on that knowledge. With its ability to automatically identify patterns and relationships in large datasets, machine learning has the potential to revolutionize the way we approach many problems in variety of fields.

Published By

Editorial Board

Shri Mukesh Kumar Jha, Scientist-'F'
Shri Dilip Jain, Scientist-'E'
Shri Anil Kumar Bhal, Scientist-'E'
Shri Prem Shanker Choubisa, Scientist-'E'
Shri Hemant Mehta, Scientist-'E'

National Informatics Centre
Rajasthan State Centre
8318, North-West Block
Government Secretariat,
C-Scheme, Jaipur, 302005
0141-2227992
Email: sioraj@nic.in
Website: <https://raj.nic.in>

Journey of NIC Officers



(Narayan Ram Seervi)

Narayan Ram Seervi DIO & Scientist-'D' NIC-Rajasthan (Sep-1988 to Dec 2022)

- Joined NIC on 29th September 1988 at NIC HQ, New Delhi and posted as a Scientific Assistant "A" & DIA at NIC Jaisalmer district centre (Rajasthan.)
- Retired from NIC Nagaur district Centre (Rajasthan) as Scientist-'D'.
- Total time period in NIC is over 34 years.
- Major contribution - Software Application Development, Implementation, Coordination & Management, Training with technical support and guidance to district administration.

Various works performed at Nagaur district includes :-

- Election work for Parliamentary, Assembly, Local bodies and Panchayat Election etc.
- Developed software for constable recruitment.
- Developed many software for various departments as per their need until a standard software were provided by Central or State Government to implement in the district.
- Worked with 26 different District Collector & District Magistrate in Nagaur district.

Received many Appreciation Certificates /Awards/Recognitions at State level and District level as under:

- State level award received from Director General of Police, Rajasthan Jaipur and E-Gov Rajasthan Awards 2012-2013 received from DoITC Dept., GOR.
- District level awards received on Independence Day (4 times) and Republic Day (5 times).



During my tenure of over 34 year at NIC district centre Nagaur, I have contributed a lot for technical growth and IT awareness in the district. I am thankful to NIC and wish all success to my organization in future endeavor.

~ Narayan Ram Seervi