



*About*

**NIELIT**

**Ropar/Chandigarh**

*Previously Regional Computer Centre(RCC)/DOEACC*





# about NIELIT Ropar/Chandigarh



erstwhile



1978

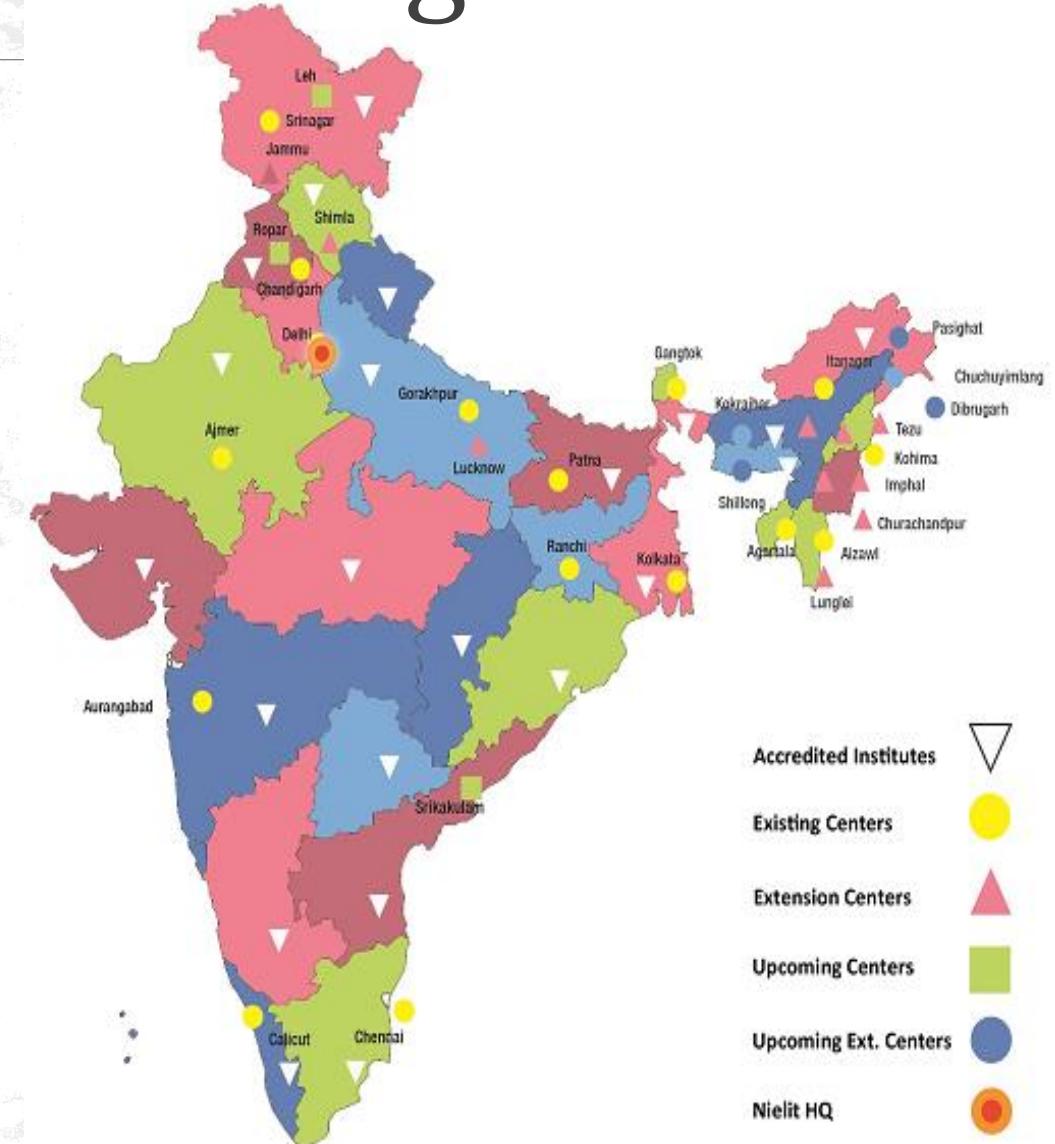
Regional Computer  
Center (RCC)



डी ओ ई ए सी सी  
2003  
DOEACC



2012 onwards





# About NIELIT

- NIELIT – National Institute of Electronics and Information Technology
  - is a Capacity Building arm of the Ministry of Electronics and Information Technology (MeitY), Government of India
  - offers courses in IECT in the Formal as well as the Non-Formal Sectors of Education
  - is playing a key role in Digital India, Make in India & Skill India initiatives undertaken by Govt. of India
- Pan India presence – 50+ NIELIT Centres
- Network of over 1100+ private accredited Centres and
- About 8500+ Facilitation Centres actively engaged in Digital Literacy.
- NIELIT – National Examination body
  - vast experience in conducting Online examinations and third party assessments.



# NIELIT Chandigarh

## Our Vision

To be a centre of Excellence for quality assurance in education and services in the field of Information and Communication Technology through continuous improvement and upgradation.



## Our Mission

To develop professional manpower and provide quality services in the field of Information and Communication Technology by using State-of-the-Art infrastructure.



# NIELIT Chandigarh

## Salient Features

- Modular and flexible training Programmes.
- Industry Oriented and Practical Based Courses.
- Experienced and Well Qualified Faculty.
- More than 40 years old Institute in Computer Education & Training in the region.
- Latest Teaching Aids and Methodologies.
- Well equipped Labs
- Interactive Learning



# Major NIELIT Activities

## Education and Skilling

M.Sc., B.Sc., BCA, PGDCA in affiliation with Pbi. University

PhD, M.Tech, B.Tech and 3-year Diploma Programmes

Skilling in Emerging Technologies, like AI/ML, Cyber Security, Big Data, Blockchain, AR/VR, Data Analytics, IoT, etc.

R&D with PGI and other such premiere institutes

Corporate Trainings for DRDO, DGR, RCF Kapurthala, DiTech Haryana, STPI, el al.

## Software and Turnkey Projects

NCPUL

**Energy Accounting and Billing System** of PSPCL and UT Chd

National Consumer Price Index (CPI) Calculation System for Ministry of Labour and Employment

**Online Counselling** of UT Education Department Chandigarh

Digitization of Punjab Birth & Death records

## Examination

Complete Recruitment lifecycle solutions for Govt. bodies /depts. From Pre-Exam, Examination, Post Exam Activities

OMR Based, Computer Based / Online Exams

Assessment

## Employment and Incubation Group

Deployment of technical manpower in various government departments

Tie-ups with Industry

Alumni Network placed at various key positions in various MNCs across the world, NGOs and Government Departments

## Sponsored Programmes

**FutureSkills Prime**

**Aspirational District Scheme**

**ESDM**

Directorate General of Employment

**Work Based Learning (WBL),**

**Employability Enhancement & Livelihood (EELTP)**



# NIELIT Chandigarh



Education & Training

Projects

Software Development

NCPUL

Data Processing

Examination Processing

Facility Management

Online Services

## Training & Projects

- ESDM Scheme of Govt. of India
- Corporate trainings to various Govt. departments
- Training under DGE&T scheme
- Training employment exchange officers  
National Career Service Portal
- Training to Panchayati Raj Functionaries
- Training for more than 500 CSC VLEs
- Data Digitization of NPR
- Utility Billing projects for various states
- Software Development and total IT solutions  
for various Govt. departments
- Examination and Certification
- Facility Management



# NIELIT Chandigarh – futuristic technologically ahead

MAKE IN INDIA

Artificial Intelligence

Internet of Things (IoT)

Big Data Analytics

Augmented & Virtual Reality

Blockchain

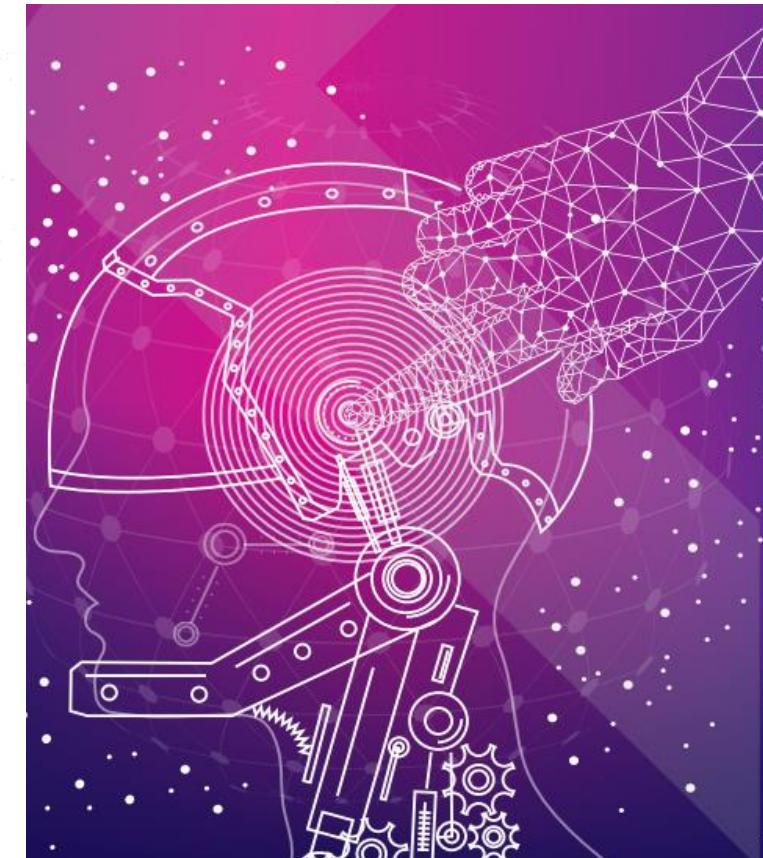
Cloud Computing

Cyber Security

Robotic Process Automation



FutureSkills Technology





# Learning at NIELIT



- The Courses here are distinctive for their unique characteristics of being **Industry Oriented** and **practice base**.
- It helps in developing the professional capabilities for meeting requirements of Industry as well as reorient and **update the knowledge skills**.
- The programs are **modular** and **flexible**.
- Personal attention to every student is given during the development of project.
- Technically sound and **experienced faculty** provides the best education and full guidance and support during project work.

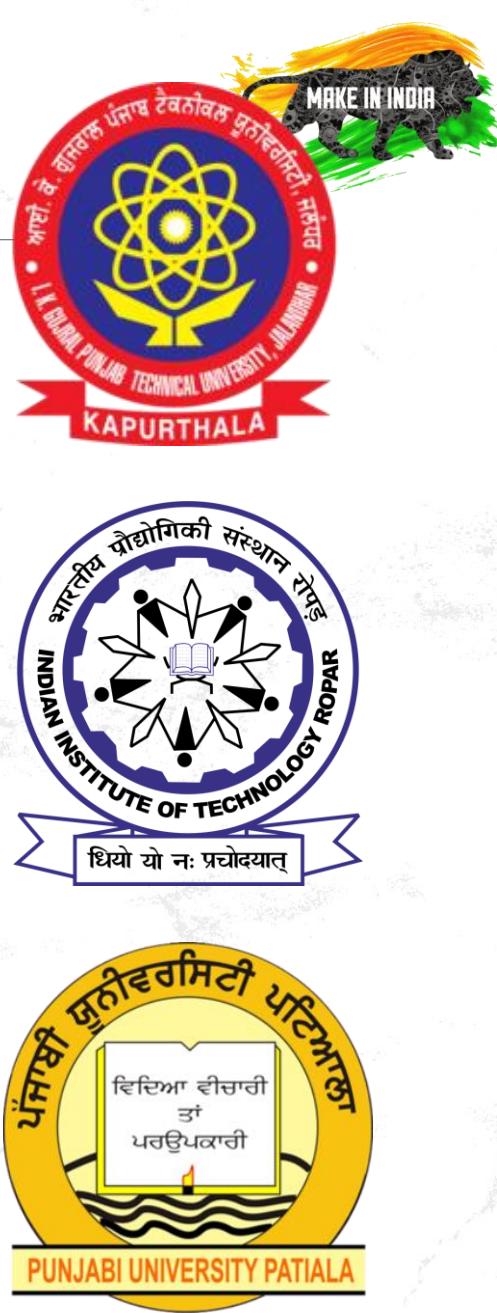


**Trained more than One Lakh students in non-formal sector**



# MoU

- NIELIT & I.K.Gujral Punjab Technical University (IKG-PTU) have entered into an MoU to provide Training in the field of IECT and all related areas by NIELIT to students of IKG-PTU affiliated colleges / institutes under following categories:
  - Semester /Industrial Training Programmes of 5-6 months duration
  - Summer Training Programmes of 6-8 weeks duration
- Joint Certification Training Programmes with IIT Ropar under the following categories:
  - Summer (6-8 weeks)/Industrial (6 Months)
  - Finishing School Courses
  - Train the Trainers Workshops
- Punjabi University Patiala - Formal training Programmes





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# NIELIT – MoU with Universities



IIT Ropar, Punjab



PEC Chandigarh



Rayat Bahra University, Mohali,  
Punjab



IKG PTU, Jalandhar, Punjab



Lamrin Tech Skill University,  
SBS Nagar, Punjab



MIMIT, Malout, Punjab



Govt. College Ropar, Punjab



IET Bhadhal, Punjab



Institute for Development and  
Communication (IDC) , Chandigarh



Gobindgarh Public College  
Ludhiana Punjab



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# NIELIT – MoU with Universities



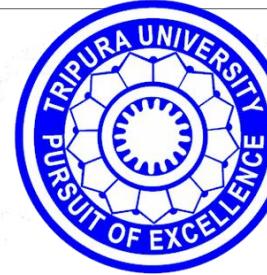
Delhi Technological University



Netaji Subhas University of Technology



Dr. A.P.J. Abdul Kalam Technical



Tripura University



Chhattisgarh Swami Vivekanand Technical University



Madan Mohan Malaviya University Of Technology



Dr. B. R. Ambedkar University Delhi



Dr B R Ambedkar National Law University Sonepat



Dr. Babasaheb Ambedkar Marathwada University



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# NIELIT - MoU with Academic Institutions



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All India Council for Technical Education



United Nations Educational, Scientific and Cultural Organization



Institution of Electronics and Telecommunication Engineers



Central Board of Secondary Education



Skilling India in Electronics



National Institute of Technology Delhi



L&T Skill Trainers Academy



Atal Bihari Vajpayee Indian Institute of Information Technology and Management



CSC Academy



Indira Gandhi National Tribal University



Bharatiya Shiksha Board



Directorate General of Training



Centre for Good Governance



National Skill Development Corporation



# NIELIT - MoU with Industry



Indigrid Technology Private  
Limited



INTEL



HCL



SoCTeamup Semiconductors  
Pvt. Ltd



Monster.com India



National E-Governance Division



Snapdeal



Telecom Sector Skill Council



Telecommunications  
Consultants India



Insurance Regulatory and  
Development Authority

<https://nielit.gov.in/content/mou-industry-academic-institutions-universities>



# Education & Training

## Long Term Course

- ✓ NIELIT 'O' Level Computer Course
- ✓ NIELIT 'A' Level Computer Course
- ✓ NIELIT 'B' Level Computer Course
- ✓ NIELIT 'O' Level on Hardware Maintenance
- ✓ NIELIT 'A' Level on Hardware Maintenance
- ✓ Post Graduate Diploma in Computer Applications
- ✓ Diploma in Computer Hardware

## Short Term Course



- ✓ Artificial Intelligence and Machine Learning
- ✓ Cloud Computing and Virtualization
- ✓ JAVA, Python, ASP.Net with C# / VB.Net
- ✓ PHP with MY SQL and CMS
- ✓ Cyber Security
- ✓ Networking-CCNA V 5.0 Routing & Switching
- ✓ Data Analytics/Big Data
- ✓ Electronic Product Design (EPD)
- ✓ Internet of Things (IoT)
- ✓ Raspberry pi with Python
- ✓ Embedded System Design- 8051, ARM7



# Corporate Training

## Govt. Department/organization

- ✓ Rail Coach Factory(RCF), Kapurthala
- ✓ Punjab Police IT Wing
- ✓ DiTech – Haryana Govt.
- ✓ CEPTAM – DRDO
- ✓ Labour Department, Haryana
- ✓ Health Department, Punjab
- ✓ Punjab Mandi Board
- ✓ Haryana State Pollution Control Board
- ✓ Economical and Statistical Organization, Haryana
- ✓ PGI, Chandigarh

## Govt. Dept./University

- ✓ DCRUST, Murthal, Haryana State Govt. University
- ✓ GNDU Amritsar, Punjab State Govt. University
- ✓ Uttarakhand Technical University, Dehradun
- ✓ SKUAST, Jammu and Kashmir State Govt. University
- ✓ State Aids Control Society, Chandigarh
- ✓ Zila Welfare Office, Chandigarh
- ✓ State Bank of India



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# Centre of Excellence





# Industry TieUps - CISCO Networking Academy



NIELIT Chandigarh is part of **CISCO Networking Academy** Programme since 2005

- Cisco Networking Academy has changed the lives of 10.9 million students in 180 countries by providing education, technical training, and career mentorship, since last 20 years.
- Cisco Networking Academy is a global education programme that teaches students how to **design, build, troubleshoot, and secure computer networks** for increased access to career and economic opportunities in communities around the world.
- More than 6 million people have joined the Networking Academy and become a force for change in the digital economy since 1997.





# CISCO Networking Academy

Courses under **CISCO Networking Academy** includes:

- Networking
- Internet of Things
- Operating Systems
- Programming
- Cyber Security



**Cisco Networking Academy**

**Introduction to IoT**

The student has successfully achieved student level credential for completing Introduction to IoT course administered by the undersigned instructor. The student was able to proficiently:

- Explain how IoT are businesses and go
- Explain the importance of society.

**manjot singh**  
Student  
**NIELIT Chandigarh**  
Academy Name  
**India**  
Location

**Dr. Sarwan Singh**  
Instructor

**PYTHON INSTITUTE**  
OpenEDG Python Institute Authorized Academy Program

**OPEN EDG**

**Statement of Achievement**

**PCAP: Programming Essentials in Python**

The graduate of the **PCAP: Programming Essentials in Python** course, provided by **Cisco Networking Academy®** in collaboration with **OpenEDG Python Institute**:

- knows the universal concepts of computer programming, including variables, data structures, algorithms, control flow, functions, and exceptions;
- can proficiently use the developer tools, the runtime environment, and the syntax and semantics of the Python language;
- can use fundamental programming techniques, best practices, customs, and vocabulary, including the most common standard library functions in Python 3;
- can write Python programs using standard language infrastructure, and knows the means by which to resolve typical implementation problems;
- knows how to work with modules and packages, process text and binary files, and use generators, iterators, and closures;
- understands the fundamentals of object-oriented programming (OOP) and the way they are adopted in Python.

**Faisal Yaseen Shah**  
Student

*[Signature]*

Maciek Wichary  
VP & CEO, OpenEDG

**27 Mar 2022**  
Date

*[Signature]*  
**Dr. Sarwan Singh**  
**NIELIT Chandigarh**

[www.netacad.com](http://www.netacad.com) | [www.pythoninstitute.org](http://www.pythoninstitute.org)



# NIELIT Ropar campus

# Faculty @ NIELIT Ropar

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# Faculty @ Data Analytics Division

Dr. Manish Arora

- ✓ PhD, Punjab University
- ✓ DOEACC C Level
- ✓ MCA GNDU Amritsar
- ✓ M.B.A. with specialization in Operation Management
- ✓ More than 30+ years of experience in technologies like C, DSTC, Software Engineering, Big Data Analytics, Cloud Computing, .Net, SQL Server.



Dr. Sharmistha

- ✓ PhD
- ✓ MSc, BSc
- ✓ 28+ years of experience in Big Data Analytics, Cloud Computing, .Net, SQL Server.





# Faculty @ AI and Machine Learning Division

Anita Budhiraja



- ✓ B. Level, C Level (Mtech)
- ✓ 30+ years of experience in training, research, AI ML , Data Science

Suman Heera



- ✓ B. Tech (CSE)
- ✓ M. Tech(pursuing)
- ✓ 15+ years of experience in training

Dr. Sarwan Singh



- ✓ PhD (Computer Science)
- ✓ C Level, B Level (MCA)
- ✓ MSc, B.Sc. (Electronics)
- ✓ 25 years of experience in Training, Software Development, Networking, Product Design
- ✓ Currently working in areas of Cloud computing, Internet of Things(IoT), Machine learning, AI, Blockchain



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# Faculty @ Electronics Division

Prakash Pratik

- ✓ B. Tech(ECE) NIT Patna
- ✓ M.S. (IIT Mandi)
- ✓ 8 years of experience in training, research, R & D product designing



Snehasis Joardar

- ✓ Btech (ECE)
- ✓ Mtech (Nanotechnology) NIT Kurukshetra
- ✓ 3+ years of experience in Training, networking, IoT, etc

Akhil Arora

- ✓ B. Tech (ECE), M. Tech (ECE)
- ✓ 16+ years of experience in training, networking, IoT, etc



Jaspreet Singh

- ✓ B. Tech (ECE)
- ✓ 10+ years of experience in training, maintenance, hardware and networking





# Faculty @ Cyber Security Division

Raminder Singh



- ✓ BTech(CSE) SLIET
- ✓ Mtech(CSE) PTU
- ✓ 22+ years experience in Information Security and Digital payment Awareness, Advanced Networks (CCNA), Cyber Security
- ✓ Cisco Local Academy Instructor
- ✓ EC Council Certified Ethical Hacking Instructor

Akash Saran



- ✓ B. Tech(IT) IIIT Allahabad
- ✓ PGDISS
- ✓ 4 years of experience at Software Engineer in Samsung R&D , Noida
- ✓ 4+ years of experience in Cyber security & Web Designing



# Faculty @ Computer Application Division

**Dr. Sunita Chib**

- ✓ Ph.D (Computer Science and Applications)
- ✓ Master of Computer Science (MCS)
- ✓ Bachelor of Computer Science (BCS)
- ✓ 25+ years experience in training, project execution, Software Development, NCPUL IT Education Project/Examination



**Dr. Munir Ahmad**

- ✓ Ph.D (Computer Science and Applications)
- ✓ M.Sc Computer Science
- ✓ 20+ years of experience in teaching cyber security, Databases, Adv. Algorithm design

**Shaweta Sharma**

- ✓ B.E Computer Science
- ✓ 15+ years of experience in teaching computer science education, with expertise in networking, Cisco.

**Jyoti Sharma**

- ✓ MCA
- ✓ 27+ years of experience in Augmented and Virtual Reality PHP and MySQL Multimedia



# Students @ NIELIT campus

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# CEPTAM – DRDO

Training in domain of

- AI-ML,
- Electronics,
- Skill Development / office Automation

ESDA@ 2019



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# CEPTAM - DRDO



@ 2021





# CEPTAM – DRDO

Sep@ 2022



Aug@ 2022



# CEPTAM - DRDO

@ 2023 



Top Row :  
(left to right)

Sh. Marpu Sudhir Kumar TO 'A' CVRDE Chennai, Sh. Abhishek Kumar Jha TO 'A' RCI Hyderabad, Sh. Prakash Pratik STA NIELIT Ropar, Dr. Sanjeev kr. Gupta Executive Director NIELIT Ropar, Dr. Manish Arora Addl. Director NIELIT Ropar, Dr. Sarwan Singh

Scientist-D NIELIT Ropar, Sh. Anuj Kumar Shaw STA 'B' DIBER Haldwani, Sh. Devadutta Prusti TO 'A' LRDE Bengaluru

Middle Row :  
(left to right)

Sh. Mithun Mohan C TO 'A' NPOL Kochi, Sh. K Ranga Babu STA 'B' CHESS Hyderabad, Sh. Sarata Kumar Nandi TO 'A' CAIR Bengaluru, Sh. Abhishek Tripathi STA 'B' DEBEL Bengaluru

Front Row :  
(left to right)

Ms. Kaveri TO 'B' LRDE Bengaluru, Sh. Sintu Kumar TO 'A' CAIR Bengaluru, Sh. Rajesh M STA 'B' NPOL Kochi, Ms. Riya Kumari STA 'B' NPOL Kochi, Ms. Adya Kumari STA 'B' CASDIC Bengaluru, Ms. Surya OV TO 'B' LRDE Bengaluru, Sh. Sunil Kumar TECH 'A' CASDIC Bengaluru, Sh. Kapil STA 'B' CASDIC Bengaluru



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# CEPTAM – DRDO



@ 2024



Top Row : Sh. Parkash Pratik STA NIELIT Ropar, Sh. Mithun Halder STA 'B' DRDE Gwalior, Sh. Anoop Verma TO 'A' VRDE Ahmednagar, Dr. Sarwan Singh Scientist-D NIELIT Ropar, Mrs. Anita Budhiraja Scientist-E NIELIT Ropar,

Middle Row : Sh. Tadavi Amit Jumma STA 'B' GTRE Bengaluru, Sh. Saurabh Gupta STA 'B' ADE Bengaluru, Sh. Alok Kumar Jain TO 'C' Agra Cantt, Dr. Sanjeev Kumar Gupta ED NIELIT Ropar, Sh. Jasvir Singh Scientist-D NIELIT Ropar, Sh. Raj Kumar STA 'B' RCI Hyderabad, Sh. Afroj Ali TO 'A' DLRL Hyderabad, Mrs. Smita Roy STA 'B' NSTL Visakhapatnam, Sh. Asampalli Ellesh STA 'B' NPOL Kochi, Sh. Dinesh Kumar Singh STA 'B' DLRL Hyderabad,

Front Row : Ms. Azra Perween STA 'B' GTRE Bengaluru, Sh. Pranav Maurya STA 'B' DRDL Hyderabad, Sh. A Anil Kumar TO 'A' DLRL Hyderabad, Sh. Gundagani Srikanth TO 'A' DLRL Hyderabad, Mrs. T K Jayanthi TO 'D' NPOL Kochi, Sh. Avadhesh Yadav STA 'B' INMAS Delhi, Sh. Shashi Shourav STA 'B' DLRL Hyderabad, Sh. Mannu Kumar STA 'B' DEAL Dehradun, Sh. Ritesh Ransore STA 'B' NSTL Visakhapatnam



# Students from Nagaland University

@ 2021



@ 2023



@ 2019



@ 2019





# Students from MG Central University, Bihar



@ 2024



# Campus next to IIT Ropar



PIM





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# NIELIT students at IIT Ropar

- 2019 onwards ...



# Projects

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AIoT Rain Prediction:

View Live Real-time Sensor Data

Rain Prediction through Machine Learning

Live weather forecast through Weather API integration

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Developer: Dr. Sarwan Singh JD NIELIT Ropar

TID	Sensor ID	Sample Name	Temperature	Humidity	Server Timestamp
400	DHT-11	Weather	27.2 °C	54.2 %	2024-08-13 09:49:19
399	DHT-11	Weather	27.2 °C	54.2 %	2024-08-13 09:49:13
398	DHT-11	Weather	27.2 °C	54 %	2024-08-13 09:49:07
397	DHT-11	Weather	27.3 °C	54.1 %	2024-08-13 09:49:01
396	DHT-11	Weather	27.3 °C	54.1 %	2024-08-13 09:48:55
395	DHT-11	Weather	27.3 °C	54.1 %	2024-08-13 09:48:48
394	DHT-11	Weather	27.3 °C	54.2 %	2024-08-13 09:48:42

Live Weather Forecast - NIELIT Ropar

Enter the Location

What's the Weather

Go Back to Home Page

Current Temperature in Ropar

29.4°C / 84.8°F ☀️

Last Updated: 2024-08-13 11:00

Region: Punjab / India Latitude: 30.97° Longitude: 76.53° TimeZone: Asia/Kolkata LocalTime: 2024-08-13 11:14

Condition: Light rain shower Wind: 4.3mph / 6.8kph Wind Direction: 237° WSW Pressure: 1006.0mb / 29.71in Precip: 1.05mm / 0.04in

Humidity: 73Feelslike: 34.1°C / 93.3°F Visibility: 10.0km / 6.0miles UV: 6.0Gust mph: 5.4mph / 8.6kph

Rainfall Prediction

Temperature	Server Timestamp
27.2 °C	2024-08-13 09:49:19

Latest Temperature readings from our DHT-11 sensor

Year: 2017

Month: January

Temperature in Celsius

Predict Rainfall

Refresh

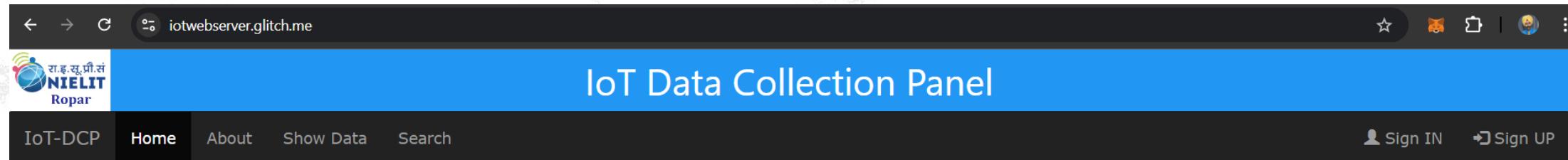
Go Back to Home Page

Rainfall Prediction: Year: 2024





# IoT Web server (Data Collection Panel)



The screenshot shows a web browser window with the URL `iotwebserver.glitch.me`. The page title is "IoT Data Collection Panel". The navigation bar includes links for "IoT-DCP", "Home", "About", "Show Data", and "Search". On the right, there are "Sign IN" and "Sign UP" buttons. The main content area is titled "Sensor Data" and displays a table with the following data:

ID	User Name	Sensor Name	Temperature	Humidity	DateTime
189	CGClandran	sensor102	26.0	95.0	13-08-2024
188	CGClandran	sensor102	24.0	68.0	13-08-2024
187	CGClandran	sensor102	25.0	70.0	13-08-2024
186	CGClandran	sensor102	27.0	95.0	13-08-2024
185	CGClandran	sensor102	26.0	66.0	13-08-2024
184	CGClandran	sensor102	26.0	66.0	13-08-2024
183	CGClandran	sensor102	27.0	53.0	13-08-2024
182	CGClandran	sensor102	27.0	56.0	13-08-2024
181	CGClandran	sensor102	25.0	56.0	13-08-2024
180	CGClandran	sensor101	25.0	71.0	13-08-2024