Report on Internal Hackathon of Smart India Hackathon 2025

About the Event:

Centurion University of Technology and Management, Odisha, conducted a successful internal hackathon to select the best student teams for the national-level Smart India Hackathon (SIH) 2025. The event was held in a hybrid format, making it a grand success by uniting students from multiple campuses; participants from the Bhubaneswar campus engaged in offline mode while those from the Paralakhemundi campus joined virtually. This preliminary round aimed to foster innovation and interdisciplinary collaboration, encouraging students from various branches to form diverse teams and develop solutions for real-world problem statements. The ultimate objective was to identify and prepare the most promising projects and teams to represent the university in the main SIH 2025 competition.

About the Problem Statements:

Smart Helpdesk Ticketing solution For IT Services
Smart Education
Ai based crop recommendation for farmers
AI Tool For Early Stage Dementia Detection
AI-based Farmer Query Support and Advisory System.
AI-powered crop prediction and optimization
AI-Powered Personal Farming Assistant for Kerala Farmers
Al-Driven Public Health Chatbot for Disease Awareness
AR based cultural heritage preservation platform +C10:C46
Authenticity Validator for Academia
Automated Student Attendance Monitoring and Analytics System for Colleges
Automated attendance system for Rural Schools
Blockchain-Based Blue Carbon Registry and MRV System
Carbon Aware: Tracking Daily Lifestyle Emissions
Centralized Digital Platform for Comprehensive Student Activity Record in HEIs
Crowdsourced Civic Issue Reporting and Resolution System
Cybersecurity Framework for Rural Digital Banking
Design and develop an Al/ML-based Decision Support System for optimizing rake formation strategies for SAIL, with the initial implementation focused on movements from Bokaro Steel Plant to CMO stockyards and customer locations.
Develop a blockchain-based system for botanical traceability of Ayurvedic herbs, including geo-tagging from the point of collection (farmers/wild collectors) to the final Ayurvedic formulation label

Development of a Digital Mental Health and Psychological Support System for Students in Higher Education

Development of a travel related software app that can be installed on mobile phone that could capture trip related information

Development of an Al-driven ChatBOT for INGRES as a virtuall assistant

Digital Health Record Management System for migrant workers in Kerala aligned with sustainable development goals.

Digital Learning Platform for Rural School Students in Nabha

Digital Platform for Personalized Career and Skills Advisory.

Disaster Response Drone for Remote Areas

ERP-based Integrated Student Management system

Gamified Environmental Education Platform for Schools and Colleges

Gamified Learning Platform for Rural Education

"Improved Onion storage technology for enhancing shelf life of onions"

"Intelligent Pesticide Sprinkling System Determined by the Infection Level of a Plant"

Language Agnostic Chatbot

Maximizing Section Throughput Using Al-Powered Precise Train Traffic Control

One-stop personalized career &Education Advisor

Online Chatbot based ticketing system

"Proposal for Design and Development of Application or Heavy Metal Pollution Indices."

Publications Summary Generator for Faculty Profiles

Railway Track Obstacle Detection & Early Alert System

Real-Time AI/Ml-Based Phishing Detection and Prevention System

Real-time based pressure measurement device to optimize orthotic design and patient outcomes.

Renewable Energy Monitoring System for Microgrids

Secure closed group communication platform over exisiting public mobile communication networks for defence personnal and families.

Sentiment analysis of comments received through E-consultation module

Smart Classroom & Timetable Scheduler

Smart classroom mangement software for enhanced learning environment

Smart Crop Advisory Systerm for Small and Marginal Farmers

Smart Curriculum Activity & Attendance App.

Smart helmet

Smart Tourist Safety & Incident Response System

Smart Traffic Management System for Urban Congestion

Student Innovation: Swadeshi for Atmanirbhar Bharat - Disaster Management

Student Innovation: Swadeshi for Atmanirbhar Bharat - Smart Automation

Telemedcine Access for Rural Healthcare in Nabha

Voice-Controlled Gaming Tools for Enhanced Learning in the Skill Ecosystem

Event Photos:

Judging Process:

SIH-2025 Internal Hackathon – Judging Criteria & Rubrics

Criteria	Weightage	Score (1–5)	Weighted Score
Problem Understanding & Relevance	15%		
Innovation & Creativity	20%		
Technical Feasibility & Implementation	25%		
Usability & User Experience	15%		
Scalability & Sustainability	10%		
Presentation & Communication	10%		
Team Collaboration & Effort	5%		
Total	100%		

Detailed Scoring Rubric

Problem Understanding & Relevance

5 – Excellent: Clear understanding, strong alignment, real-world impact.

4 – Good: Well understood, relevant with minor gaps.

3 – Average: Partially understood, somewhat aligned.

2 – Poor: Limited understanding, weak alignment.

1 – Very Poor: Misunderstood or irrelevant.

Innovation & Creativity

5 – Excellent: Highly original, out-of-the-box, unique.

4 – Good: Some innovation, meaningful improvements.

3 – Average: Functional but common.

2 – Poor: Minimal novelty, minor tweaks.

1 – Very Poor: No innovation, copied.

Technical Feasibility & Implementation

5 – Excellent: Strong technical base, working advanced prototype.

4 – Good: Functional prototype, minor bugs.

3 – Average: Partial demo, basic implementation.

2 – Poor: Very limited technical work.

1 – Very Poor: Non-working prototype.

Usability & User Experience

5 – Excellent: Intuitive, user-friendly, accessible.

4 – Good: Easy to use, minor improvements needed.

3 – Average: Usable but not polished.

2 – Poor: Complex or confusing.

1 – Very Poor: No focus on UX.

Scalability & Sustainability

5 – Excellent: Highly scalable, sustainable, cost-efficient.

4 – Good: Some scalability, moderately sustainable.

3 – Average: Limited scalability, short-term use.

2 – Poor: Very little scope for scaling.

1 – Very Poor: Not scalable.

Presentation & Communication

5 – Excellent: Clear, confident, effective demo.

4 – Good: Well-structured, slightly lacking polish.

3 – Average: Some unclear parts.

2 – Poor: Weak communication, hard to follow.

1 – Very Poor: No clarity, poor demo.

Team Collaboration & Effort

5 – Excellent: Excellent teamwork, balanced contribution.

4 – Good: Good collaboration, minor gaps.

3 – Average: Uneven contributions.

2 – Poor: Minimal teamwork.

1 – Very Poor: No collaboration.

Jury Panel:

External Jury Members:

Dr. Sanjit Kumar Dash is a faculty member in the School of Computer Sciences at the Odisha University of Technology and Research (OUTR) in Bhubaneswar. His primary research expertise is in Wireless Networks (particularly Wireless Sensor Networks), Cloud Computing, and Network Security. He has published numerous works focusing on the integration of these technologies, often referred to as "Sensor-Cloud."

Dr. Satya Prakash Rout is the Head of Department, combining over a decade of academic leadership with industry experience from Honeywell Technology Solutions. An award-winning researcher with numerous publications and patents, his work focuses on next-generation communication like 5G/6G technologies, Massive MIMO, and the Internet of Things (IoT).

Mrs. Anjana Mishra is an Assistant Professor at C.V. Raman Global University and is currently pursuing her Doctor of Philosophy (Ph.D.). She has collaborated on a Samsung Prism Project focusing on development unit testing, specifically on the automated prediction and suggestion of test cases using Java and Kotlin.

Dr. Meenakshi Kandpal is an Assistant Professor in the Computer Science and Engineering Department at OUTR, Bhubaneswar, with over 15 years of academic experience. Her research focuses on the intersection of cutting-edge technologies, including Blockchain, Machine Learning, Cloud Computing, and Serverless Computing. She is a seasoned researcher with numerous publications and patents to her name.

Internal Jury Members:

Dr. Sunil Kumar Mohapatra is an Assistant Professor in the Department of Computer Science Engineering at Centurion University of Technology and Management, Bhubaneswar. With over 15 years of teaching experience, his research expertise lies in Data Science, Machine Learning, Deep Learning, Wireless Sensor Networks, and IoT Security. He is also a member of the Institute of Electrical and Electronics Engineers (IEEE).

Dr. Satyananda Swain serves as an Assistant Professor in the CSE Department at Centurion University, bringing over 17 years of teaching experience. His expertise and research are focused on advancing computational methods in Artificial Intelligence, Data Science, Blockchain, and Bioinformatics. He is dedicated to integrating these emerging technologies into education and practice.

Mrs. Swatilagna Sahu is an Assistant Professor at Centurion University, Bhubaneswar, who uniquely combines over 13 years of teaching with 4+ years of industry experience in software testing and IT infrastructure. A member of IEEE and currently pursuing her Ph.D., her expertise and passion lie in Cybersecurity, Data Analytics, Artificial Intelligence, and Software Engineering.

Mr. Sushanta Meher is an Assistant Professor in the Department of Computer Science and Engineering at Centurion University's Bhubaneswar campus. With 7 years of teaching experience, he is committed to advancing research and academic excellence while currently pursuing his Ph.D. in Computer Science and Engineering from ITER, Siksha ‘O’ Anusandhan University.

Dr. Chinmayee Dora is an Associate Professor in the Electronics and Communication Engineering department at Centurion University, Bhubaneswar, bringing over two decades of academic and research experience. Her primary research interests lie in biomedical signal and image processing, machine learning, deep learning, and computer vision. She is a widely published author and an active peer reviewer for prestigious international journals.

Mr. Subrat Kumar Pradhan is an Assistant Professor in the Department of Electronics and Communication Engineering at Centurion University, Bhubaneswar. With a teaching career spanning 19 years, his expertise is demonstrated through his work on numerous real-time IoT projects and five published patents in the field. He is also an active member of several professional engineering societies.

Dr. Sujit Mishra is the Associate Professor and Head of the Mechanical Engineering Department at Centurion University's Paralakhemundi campus. With over 11 years of academic experience and five patents to his name, his research expertise lies in Computational Fluid Dynamics (CFD), automotive aerodynamics, machine design, and additive manufacturing. He is a life member of several professional engineering societies.

Dr. Dhawaleswar Rao Ch is an Associate Professor of Computer Science and Engineering with research affiliations at both Centurion University and KL University. His work focuses on cloud computing networks and enhancing security for IoT-enabled systems. He is a widely cited author on Google Scholar for his significant contributions in these fields.

Nominated Top Teams:

1. **Team Zenith** Mark Secured (83%)
2. **Code vibers** Mark Secured (80%)
3. **KisanTech Titans** Mark Secured (80%)
4. **Neural Nexus** Mark Secured (79%)
5. **Alchemists** Mark Secured (79%)

Judges Information:

Dr. Sudhansu Kumar Samal holds dual leadership roles as the Associate Dean (Academics) and Head of the Electrical and Electronics Engineering Department at Centurion University, Bhubaneswar. An award-winning researcher with extensive publications, his work focuses on Power Systems, Battery Management Systems, and Electric Vehicle Power Transmission Design.

Dr. Abinash Gaya working as an Associate Professor in Dept. of Electronics and Communication Engineering at Centurion University, Odisha, India. He is also working as Coordinator of RC for Communication Technologies. He received his PhD from University of Technology Malaysia in 2023. His research areas and expertise are in Millimeter Wave 5G Antennas, 5G/6G Communications, 5G ORAN Networks, 5G IOT Connectivity.

Participating Teams & Participation Statistics:

Total number of teams : Bhubaneswar (49), Paralakhemundi (21), Total Teams - 70

Total number of students : 396

Gender wise participation

Male : 286

Female : 110

Code Vibers

Dev Forge

TechTitan Innovators

KisanTech Titans

Hashly

Coders Space

Minus

Obstacle Breakers

Next Gen Coders

EduQuest

Team ADP

Invictus

Team ThreeOneOne

Falcons

The Fractals

Game2Grow

Neural Nexus

Alchemists

Novax

Typex

Team Gladiators

AceHackers

The Elites

Carbon ReNova

Stats and Stacks

SCRIPT KIDDIES

Tecryst

Cyber Punk

Craft IQ

MCKENZIE

HackVengers

Team Solaris

ZeroPhish

TEAM HELLO WORLD

The Crypto Alchemists

Nexaura

Pentaguard

AI BASHERS

HackEdemics

Qubit

TrackGenesis

NeuraFLY

TECHTITAN

Metal Morpheus

CyberTitans

TEAM 7

AgriSmart Innovators

Tech Sena

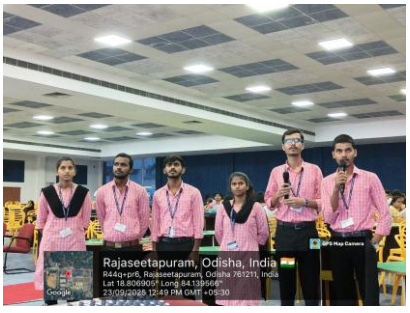
Microgrid Mavericks

Team Zenith

Syntax Squard

Bug Busters

Sickretpro



Hexa Hackers

Code Rangers

Bio Bots

InnoSphere

HackHorizon

NeuroForge

Hack Nova

pravah

Code Blooded

ElevateX

Code Crafter

Genius Brains

Krishivra

victory

Social Media Links:

Facebook -
https://www.facebook.com/share/p/1BMWfFHn5U/

https://www.facebook.com/share/p/1CTr14vY2F/

Instagram -
https://www.instagram.com/p/DO2baVcEVD8/?igsh=bDYxenRjeXFyYnl3

Twitter -
https://x.com/CUTMIndia/status/1970018447468700033?t=UqTqgYP-FT-Y-OgQsmYHxA&s=08

https://x.com/CUTMIndia/status/1971098149814194360?t=p3_wJbnuCVwegv7yFrqFIQ&s=08

LinkedIn -
https://www.linkedin.com/posts/centurion-university-of-technology-and-management_successfully-completed-internal-hackathon-activity-7376862564737245184-gjvm?utm_source=share&utm_medium=member_android&rcm=ACoAAEClUiYBw44oUa62_QGAMg_vA0IMFso6_pM

(Used the hashtags such as #sih2025 and #smartindiahackathon2025 on Facebook and Instagram.)
(Tagged the official page of the Innovation Cell, Ministry of Education, on Twitter.)