

# 5G Components in our Lab



Server Rack



5G Handsets



5G Radio (gNode B)



5G AI Camera



IOT sensors setup



IOT Gateway



NMS Terminal



Drone testing Station



5KVA UPS



5G Indoor CPE



AR-VR Setup

# Explore

*The new horizons of  
Edge Computing (MEC),  
IP Multimedia Subsystem (IMS),  
5QI/QoS and IoT Platforms.*

## Get in touch!



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Welcome to  
The 5G Lab

(Funded by the DoT, Govt. of India  
under 100 5G Initiative)

Empowering  
Tomorrow's Innovators

“

*“5G is a knock on the doors of a new era in the country. 5G is the beginning of an infinite sky of opportunities”*

## Our Goals

- 5G Training for students and faculties.
- Projects in 5G tech and its applications.
- Industry-Academia collaboration.
- 5G Use case development.
- Offering 5G Test setup.
- Pioneering the path towards a 6G-ready nation.



## Pioneering 5G Use Cases

**Internet of Things (IoT):**  
Designing and deployment of IoT solutions .

**Video Surveillance** with High Bandwidth and low latency 5G Technology.

**Drone Monitoring and Management** for real-time control and analysis.

**Smart City Solutions** like waste management, traffic control, and environmental monitoring.

**Environmental Monitoring and Conservation** to protect natural resources and wildlife habitats

**Agricultural Automation and Precision Farming**

**Educational Immersion and Virtual Learning** by virtual reality classrooms, interactive simulations and collaborative learning environments

**Augmented and Virtual Reality (AR/VR):** Develop immersive experiences that merge the digital and physical worlds



## Our Technical Team :

- Prof. Rabindranath Bera
- Dr. Dalia Nandi
- Dr. Pratik Chakraborty
- Dr. Amit Ranjan Azad
- Mr. Amit Kumar Sadhukhan
- Ms. Ramalita Sheet
- Ms. Riya Dey
- Mr. Samim Rahaman

## 5G Lab Coordinator :

Dr. Dalia Nandi, Dept. of ECE

## Sanchar Mitras :

- Thejus K
- Nikhil Laxminarayana
- Anujeet Verma

(Sanchar Mitra Scheme is a platform to engage students as volunteers for creating awareness of the various citizen centric services launched by DoT, Gol).