22 August 2024, Guest Lecture

The IIoT/CSE Department of PRMIT&R organized a guest lecture on **22nd August 2024** on the topic of **REST APIs**, delivered by **Mr. Aniket Belsare**, Senior Software Engineer at Qurum Software Pvt. Ltd., Pune. The session covered key concepts of RESTful web services, including HTTP methods, authentication, real-world use cases, and the role of REST APIs in IIoT systems. Mr. Belsare also demonstrated a live example of building a simple REST API and shared best practices for effective API

Lecture by Guest Aniket Belsare

design. The lecture was highly interactive, with students actively participating and gaining valuable insights into modern software development.

Felicitation of Guest

21st September 2024 Parents Meet

The IIoT/CSE-IoT Department of PRMIT&R, Badnera organized a **Parents' Meet** on **21st September 2024** at the **Mechanical Seminar Hall**, aimed at strengthening the collaboration between parents and the institution. The event, chaired by **Dr. G.R.Bamnote**(Principal, PRMIT&R), featured esteemed Guests of Honor including **Dr. S. S. Deshmukh** (Dean Administration),**Dr.H. M. Deshmukh** (Dean Academics), and **Dr. A. D. Shirbhate** (HoD, Mechanical Engineering). The **Chief Guest** was **Mrs. Jayshree Wankhade**, parent of a third-year student.

The program began with a traditional lamp-lighting ceremony, followed by insightful speeches from the dignitaries emphasizing the role of parental involvement, the importance of IoT in future careers, and the institution's commitment to holistic education. **Dr. C. N. Deshmukh**, Head of IIoT/CSE-IoT, presented the department's vision, while Mrs. Wankhade shared her positive experience as a parent.

Lamp Lighting by Guest

Felicitation of Prof. Dr. C. N. Deshmukh, HOD IIoT by Prof. Dr. K.S. Belsare

Felicitation of Topper Students

A **felicitation ceremony** honored students for academic excellence in the 2022-2023 examinations and participation in university-level cultural and sports events. A **special felicitation** was held for **Dr. G. R. Bamnote** by **Mr. S. D. Karale**, DySP, SRPF, recognizing his contributions in organizing the police examination at the institute. Mr. Karale also addressed the students, encouraging discipline and dedication to achieve success in competitive exams.

The event was well-received, fostering meaningful engagement between faculty and parents to support the academic and personal development of students.

06th January to 10th January 2025

5 Days Workshop on Arduino and Node MCU

The Department of IIoT/CSE-IoT at PRMIT&R successfully conducted a **five-day workshop on "Arduino and NodeMCU"** from **6th to 10th January 2025**, focusing on IoT fundamentals, sensor interfacing, and real-world application development. The workshop was led by **Prof. Neema Ukani** and **Mr. Amish Ukani**, who inspired students to pursue innovation in IoT and shared valuable insights into career-building. The sessions blended theory with practical exposure, covering IoT stacks, hardware programming, and applications across industries like agriculture, healthcare, and manufacturing. Students were divided into 16 groups for hands-on project activities and actively engaged in the learning process.

Principal, PRMIT & R Badnera Prof. (Dr.) G. R. Bamnote addressing the inauguration function

The event was inaugurated by **Dr. G. R. Bamnote** and graced by guests including **Dr. S. V. Pattalwar**, **Prof. V. R. Raut**, and **Prof. V. U. Kale**, who emphasized the role of skill-based training in career readiness. A felicitation ceremony honored key contributors, an **certificates were distributed during the valedictory function.**

Participated Students In the workshop

Participants expressed high appreciation for the workshop, citing improved confidence and practical skills in IoT. *T*he workshop left a strong impact, equipping students with tools and motivation to innovate in the IoT domain.

 Certificate Distributed to the Students

The schedule for the workshop is as follow:

Day-1

Sr.No.	Time	Topic
1.	10:00 A.M. to 11:30 A.M.	• Active and Passive Electronic Components identification
		• Introduction to Arduino
		• Types of Arduino Boards
2.	11:30 A.M. to 12.30 P.M.	• Arduino Uno, Nano Introduction Board Breakdown
		• Pulse Width Modulation
3.	12:30 P.M.to 01:00 P.M.	Break
4.	01:00 P.M. to 02:30 P.M.	Installation of Arduino IDE How To Program Arduino with Tinker CAD First Arduino Program. Arduino with tricolour LED, push button and buzzer Serial Monitor usage of Arduino
5.	02:30 P.M. to 04:30 P.M.	IR sensor introduction, pin out and applications Object Counter Project using IR sensor interfacing with Arduino, LCD
6.	04:30 P.M. to 05:00 P.M.	• Questions and answers

Day- 2

Sr.No.	Time	Topic
1.	10:00 A.M. to 11:30 A.M.	• LDR sensor introduction, pin out and applications • Smart Street Light project using LDR sensor interfacing with Arduino, LED, Buzzer
2.	11:30 A.M. to 12.30 P.M.	• MQ- 2 sensor introduction, pin out and applications • MQ- 2 sensor interfacing with Arduino, LCD
3.	12:30 P.M.to 01:00 P.M.	Break
4.	01:00 P.M. to 02:30 P.M.	• MQ- 135 sensor introduction, pin out and applications • Air Quality Monitoring project using MQ- 135 sensor, Arduino, LCD
5.	02:30 P.M. to 04:30 P.M.	• Rain sensor introduction, pin out and applications • Rain Alarm project using Rain Sensor, Arduino, LED, Buzzer
6.	04:30 P.M. to 05:00 P.M.	• Questions and answers

Day- 3

Sr.No.	Time	Topic
1.	10:00 A.M. to 11:30 A.M.	• Introduction of Relay, pin out and applications • Interfacing of Relay with Arduino
2.	11:30 A.M. to 12.30 P.M.	• DHT-11 sensor introduction, pin out and applications • Cold Storage Monitoring Project with DHT-11, Arduino, LCD
3.	12:30 P.M.to 01:00 P.M.	Break
4.	01:00 P.M. to 02:30 P.M.	• Sound sensor introduction, pin out and applications • Musical LEDs project using Sound Sensor, Arduino, LED
5.	02:30 P.M. to 04:30 P.M.	• Ultrasonic sensor introduction, pin out and applications • Blind Person's Assistance project using LED, buzzer, LCD and Arduino
6.	04:30 P.M. to 05:00 P.M.	• Questions and answers

Day-4

Sr.No.	Time	Topic
1.	10:00 A.M. to 11:30 A.M.	• • Introduction to the Internet of Things. • The Basics of Sensors & Actuators. Basic Intro to NodeMCU & its Architecture. • Applications of IoT
2.	11:30 A.M. to 12.30 P.M.	• The IoT Platforms Available. • Programming fundamentals (C language, HTML) • Installation of the software for NodeMCU
3.	12:30 P.M.to 01:00 P.M.	Break
4.	01:00 P.M. to 02:30 P.M.	• IP address, Allocating IP address to machine, finding IP of your system.

Day-5

Sr.No.	Time	Topic
1.	10:00 A.M. to 11:30 A.M.	• Interface DHT sensor to see data on web page.
2.	11:30 A.M. to 12.30 P.M.	• Introduction to Cloud server – Thingspeak. • Creating account and channel on Thingspeak server. • Programming DHT sensor to send data on Thingspeak server.
3.	01:00 P.M. to 02:30 P.M.	• Programming MQ-2 sensor to send data on Thingspeak server.
4.	02:30 P.M. to 04:30 P.M.	• Programming LDR sensor to send data on Thingspeak server.
5.	04:30 P.M. to 05:00 P.M.	• Questions and answers

28th January 2025

## Industrial Visit Third-year students

The Industrial IoT Department of PRMIT & R organized an industrial visit on 28th January 2025 to the Telecommunication Repeater Office at Badnera Railway Station, Amravati, for third-year students. Guided by Mr. Umang Meshram, Junior Engineer from the Central Railway Telecommunication Department, the visit aimed to provide students with practical insights into the roles of repeaters and routers in long-distance communication and railway operations.

telecommunication systems such as antennas, transmission lines, and signal processing units.
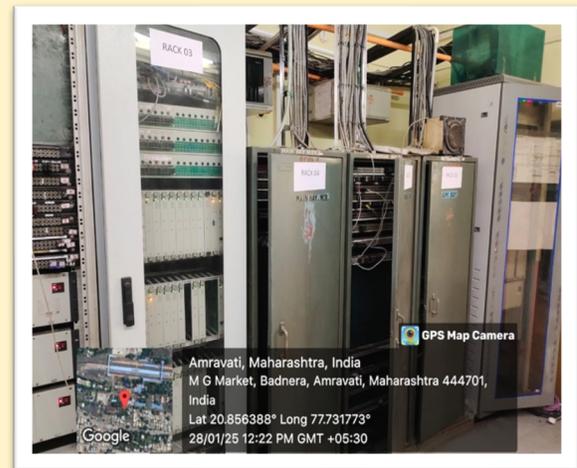
Server at Telecommunication Repeater Office

Throughout the visit, students learned how repeaters amplify and retransmit signals to prevent degradation over long distances and how routers manage network traffic to ensure accurate data delivery. The integration of these technologies in railway operations for managing schedules, ensuring safety, and maintaining coordination was thoroughly explained. Students actively participated by asking questions and engaging with hands-on

Students with Telecommunication Repeater Officer

A total of 65 students, along with faculty and staff members, participated in the visit, gaining valuable exposure to the components and functionality of

demonstrations. The visit concluded with positive feedback, as students appreciated the opportunity to connect theoretical concepts with real-world applications in telecommunication infrastructure.

Telecommunication Repeater Officer Explaining Students About Server and Repeater

31st January 2025 Wall Magazine on Biography of Late Ratan Tata

The IIoT/CSE-IoT Department of PRMIT&R inaugurated a Wall Magazine on the theme **"Biography of Late Ratan Tata"** at 12:30 PM on the department's ground floor.

Team of Wall Magazine

Student presentations were a highlight, with contributors like Ms. Nidhi Khandwe (Decoration Committee), Ms. Tapasvi More (Article on Ratan Tata's early life), and others explaining their work.

The primary goal of the wall magazine was to **educate students about Ratan Tata's legacy**, foster creativity, promote interdisciplinary learning, and develop teamwork and communication skills.

Felicitation of Guests

Creatively designed by students from all three years, the magazine was divided into sections highlighting different aspects of Ratan Tata's life and achievements, including articles, short stories, reflections, and a beautiful glass painting by third-year students. Distinguished guests, including Dr. S. S. Deshmukh, Dr. H. M. Deshmukh, Dr. D. S. Ingole, Dr. M. A. Pund, and Dr. P. V. Ingole, appreciated the students' creativity, teamwork, and innovative efforts such as an **automatic curtain opener** designed by Mr. Kshitij Pawar. Suggestions for future editions, including competitions between student batches, were also proposed to enhance engagement and innovation.

Invigilation by Guest

The initiative allowed students to explore the inspiring life of Ratan Tata through a mix of artistic expression and technical application. The event received overwhelmingly positive feedback and succeeded in making learning both engaging and impactful.

Industrial Visit of Second-year students

The Industrial IoT department of PRMIT & R organized an industrial visit on 31st January 2025 to **ECE (India) Energies Private Limited**, a prominent solar panel manufacturing company located in MIDC Amravati, for second-year students. A total of 66 students, accompanied by faculty and staff, participated in the visit. After undergoing a security check and receiving necessary safety gear like disposable hair nets and shoe covers, students were welcomed into the facility. The visit began with a briefing session where industry rules and guidelines were explained. Hosted by Mr. Atharv Pahade, the visit aimed to provide practical exposure to the solar panel manufacturing process and highlight the role of solar energy in sustainable development.

Throughout the visit, students were introduced to various stages of solar panel production—from raw material selection and assembly to testing and quality control.

Students Engagement with officer of ECE

Solar Panel at ECE.

The team also discussed the latest innovations in solar technology, including high-efficiency panels and energy storage integrations. Students showed keen interest by engaging in discussions and asking insightful questions about energy efficiency, sustainability, and the real-world applications of solar energy.

The visit was made successful through the coordination of Mr. Rajat Thakre, Mr. Dhiraj Keche, and Mr. Mohan Deshpandey, whose efforts ensured a seamless and educational experience. The visit concluded with a lunch organized by the institute, and students left with a broadened perspective on renewable energy and its future potential.

Annual Gathering:

Aashayein & Esperanza

Apurva Ghanshyam Chaudhari, a talented 3rd-year student from IIoT, secured the **1st prize** in the Aashayein singing competition with her soulful performance and captivating stage presence. Adding to her achievements, she was also **selected to represent the college in the Inter-College National Qawwali Competition**, a testament to her exceptional vocal talent and dedication to music. Her accomplishments have brought great pride to the department and serve as an inspiration for fellow students.

*Secured the 1st Prize in the Aashayein Singing Competition*

5th April 2025

Guest Lecture on Intellectual Property Rights

& IP Management

The session began with a warm welcome by Prof. Mrs. R. A. Wakode, who introduced the resource persons— Ms. Arpita Gupta, a Registered Patent Agent, and Mr. Siddhartha Yalla, a Patent Attorney and Mechanical Engineer. She highlighted the importance of startups and entrepreneurship in today's innovation-driven world.

Welcome of Resource person Ms. Arpita Gupta, Registered Patent Agent (IN/PA 5615) and Mr. Siddardha Yalla, Patent Attorney
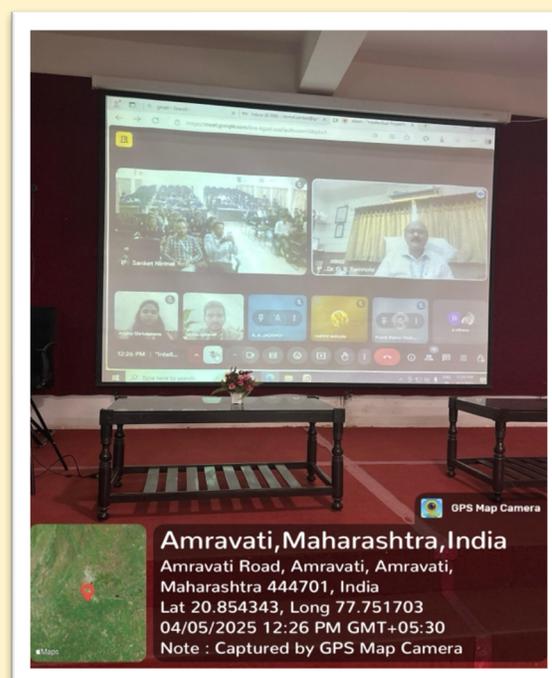
Principal Dr. G. R. Bamnote sir addressing the students

Dr. G. R. Bamnote, Principal of PRMIT&R and Chairman of the program, extended his gratitude to the speakers and inspired students to pursue innovative ideas and entrepreneurial ventures.

Ms. Arpita Gupta delivered an in-depth session on the patenting process, covering everything from drafting and structuring patent claims to filing and responding to objections. She emphasized the strategic role of patents in strengthening startups by boosting their credibility and investor appeal.

Mr. Sidhhardha Yalla Delivering his presentation

Mr. Siddhartha Yalla focused on the patentability of AI and ML algorithms, explaining how to overcome challenges in protecting such innovations and how to frame strong applications highlighting technical advancements. An interactive Q&A session followed, where students actively engaged with both experts, making the session informative and insightful.

Successful Conduction of Guest Lecture