



**Sandip University, Nashik**

**School of Computer Sciences and Engineering (SOCSE)**

**Department of Computer Science & Applications**

**Report on Industrial Visit To “Giant Meterwave Radio  
Telescope, Narayangaon (GMRT)”**

**Category of Event (Expert Lecture/Workshop/Symposium/Conference/Industry Visit/Meeting/Conference)** : **Industry Visit**  
**Title (Name of Event)** : **Giant Meterwave Radio Telescope, Narayangaon.**

**Schedule** : 28 February 2024

**Venue** : Giant Meterwave Radio Telescope, Narayangaon  
Pune

**Duration** : 1 Days

**Organizing Faculty/ Convener (s)** : Dr. Vaibhav Sonaje

**Organizing Department** : Computer Science & Application  
Mrs. Jayashri Kunde  
Mr. Mrutanjay Ranjan  
Mrs..Kalyani Deore

**Total Number of Participants** : 37 Participants

**Objectives** : The objective of the Giant Meterwave Radio Telescope (GMRT) Project on ground visit in connection with Artificial Intelligence (AI) and Machine Learning (ML) could be in the perspective of R& D, to enhance the knowledge, efficiency and effectiveness of radio astronomy data analysis and interpretation. Like "To leverage Artificial Intelligence and Machine Learning techniques within the Giant Meterwave Radio Telescope Project to optimize data processing, analysis, and interpretation, thereby enhancing the discovery potential and scientific output of the GMRT. This involves developing advanced algorithms and models to handle the vast amounts of data generated by the telescope, enabling automated detection, classification, and characterization of celestial objects and phenomena. By integrating AI and ML methodologies, the GMRT aims to streamline operations, improve data quality, and facilitate breakthroughs in our understanding of the universe."

**About the activity** : It is the offline activity for the Second Year BSc Computer Science Students of the Department of Computer Science and Application SOCSE, Sandip University, Nasik

**Conclusion & Remarks** : Students will learn in the perspective of research and development approach, that the Giant Meterwave Radio Telescope (GMRT) Project's use of AI and ML could advance radio astronomy. The GMRT uses AI and ML to revolutionize data processing, analysis, and interpretation to improve efficiency and effectiveness. Automated detection, classification, and characterization of celestial objects and phenomena advances our understanding of the universe. Insights of advanced algorithms and models to increase its discovery potential and scientific output, advancing astronomy and astrophysics.

**Geotagged Photographs** :





 GIANT METREWAVE RADIO TELESCOPE