National Institute of Technology Rourkela

Progress Seminar

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| Seminar Title | : Detection and Classification of Breast Cancer using Multimodal Images. |
| Speaker | : Dipti Deb ( Rollno : 521cs6012) |
| Supervisor | : Ratnakar Dash |
| Venue | : New Conference Hall CS323, CSE Department |
| Date and Time | : 25 Sep 2025 (16:15 Hrs) |
| Abstract | : Breast cancer is among the most prevalent and life-threatening diseases affecting women worldwide. Early detection is crucial for improving treatment outcomes and reducing mortality. As the number of cases rises, the use of multiple imaging modalities for diagnosis has also grown. However, manual interpretation of these images by radiologists and pathologists is both time-intensive and susceptible to human error. To address these challenges, computer-aided diagnosis (CAD) systems have been developed to support medical experts by reducing workload and enhancing diagnostic accuracy. Furthermore, recent progress in medical technology and the integration of artificial intelligence (AI) algorithms for image analysis have significantly improved the efficiency and accuracy of breast cancer screening. Given the complexity and large size of medical images, AI-driven models are particularly effective in classifying breast cancer and providing reliable second opinions to specialists. In this work, we focus on developing a multimodal CAD system that leverages diverse imaging modalities to achieve precise and accurate classification of breast cancer. By integrating information across multiple imaging techniques, the proposed system aims to improve diagnostic confidence, minimize errors, and contribute to more effective treatment planning. |