Bioinformatics Students participated in Manipal Biotech Hackathon 2024

Bioinformatics Students participated in the Manipal Bio Hackathon held on November 6, 2024, where they proposed an innovative solution to automate medical report generation, similar to the work of radiologists. Using Convolutional Neural Networks (CNN) and Natural Language Processing (NLP), they developed a system that can analyze CT scans to detect diseases and generate detailed, structured reports. This technology could help streamline the diagnostic process, especially in settings with fewer radiologists, by providing quick and accurate results.

They have trained CNN model on a diverse dataset of CT scan images to classify various diseases like pneumonia, tuberculosis, and lung cancer. Along with the CNN model, they have used NLP to convert the analysis into easy-to-understand medical reports. The work aimed to bridge the gap between machine learning and healthcare, providing both efficient diagnostics and readable insights for medical professionals.

The project was a collaborative effort by team:

- Devansh Kalia (2nd year BI)
- Prateeksha (2nd year BI)
- Divyanshi (3rd year BI)
- Abheek (3rd year BI)
- Pakhi Gupta (3rd year BI)