INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Technologies and Expertise available at IITB w.r.t COVID-19

Areas of expertise

AI/ML based approaches

a. **Prof. R. B. Sunoj:**
➢ Our recent efforts in the use of machine learning is applicable to drug discovery and process (such as catalytic reactions) related to efficient generation of such potentially active compounds.
➢ We would like to use a combination of density functional theory computations to accelerate the process of identifying lead compounds.

b. **Prof. Maryam Baghini**
➢ Non-invasive and minimally-invasive devices for health monitoring, diagnosis an biotelemetry in portable, wearable and implantable applications with support features based on IoT; Team has demonstrated a full working prototype using in-house designed ASICs (application specific integrated circuits) with artifact-tolerant signal conditioning and record noise efficiency factor for multi-parameter multi-channel for both monitoring and pre-diagnosis purposes with MedRadio biotelemetry; working on the development of several size-reduced, indigenous and improved measurement devices used in the clinics by the doctors; Also works on machine learning based techniques for pre-diagnosis applications