



**2020 International Conference
on
Computer Science, Engineering and Applications
(ICCSEA 2020)**

IEEE Conference Record #49143

(March 13 – 14, 2020)

Organized by
Department of Computer Science & Engineering
GIET University, Gunupur-765022, India

IEEE
KOLKATA SECTION



1. Session Title Name:

Health Informatics: Improving Healthcare using Machine Learning Techniques

2. Session Chair Information:

Prof. Rakhee Kundu,

NMIMS University, Mumbai

Email ID: Rakhee.Kundu@nmims.edu

3. Theme of the session:

Machine Learning is one of the key technologies that is being currently used to perform predictive analytics tasks in the Healthcare domain, thanks to the abundance of medical data being generated and collected. Nowadays medical data is available in many different forms like MRI images, CT Scan images, EHR data, Test reports, histopathological data, Doctor Patient conversation data, etc. This opens up huge opportunities for the application of Machine Learning techniques, to derive data driven models that can be of very high utility, in terms of providing effective treatment to patients. Moreover, Machine Learning algorithms can uncover hidden patterns and relationships present in medical datasets, which are too complex to uncover, if a data driven approach is not taken. With the help of Machine Learning systems, today it is possible for researchers to predict an accurate medical diagnosis for new patients, using models built from previous patient data. Apart from automatic diagnostic tasks, Machine Learning techniques have also been applied in the process of drug discovery, by which a lot of time and money can be saved. Utilization of Genomic data using Machine Learning is another emerging area, which may in fact be the key to fulfilling the dream of personalized medications. Medical prognostics is another area in which Machine Learning has shown great promise recently, where automatic prognostic models are being built that can predict the progress of the disease, as well as can suggest the potential treatment paths to get ahead of the disease progression. Our special session on “Health Informatics: Improving Healthcare Using Machine Learning Techniques” aims at attracting research works, to demonstrate the potential and the advancements of machine learning approaches to utilize healthcare centric and medical datasets.

The theme of this session is to provide an international platform to all the world developers, researchers to engage in scientific discussion on the current research and the latest advancements in Engineering Technology and Management which facilitates for the exchange of new ideas and further improvement in it. By blending the available theories of engineering and technology and management, the session aims at drawing new knowledge and ideas in these fields of engineering and management by involving the theoreticians like the researchers, students, teachers and the practitioners namely the industrialists to integrate the theory and the practice to achieve the goal of operational efficiency.

4. Table of Contents:

Topic of Interest include, but are not limited to:

- Clinical decision support systems
- Optimization of machine learning approaches applied to health-care
- Chronic disease management
- Medical Data mining
- Patient analytics
- Machine learning applications for Healthcare Applications
- Precision healthcare/ personalized healthcare
- Predictive analytics on Medical Images
- Improving Patient Experiences Using Machine Learning
- Public Health Bioinformatics
- HEALTHCARE: Devices, systems and Innovative Technologies
- AI wearable for healthcare
- Smart system for remote healthcare
- Integrated systems
- Electronic Medical data
- Problems in health data processing
- Electronic health records and standards
- Pervasive Healthcare Information System and Services

5. Potential Reviewers:

1. Prof. Rakhee Kundu, NMIMS University, Mumbai

Email ID: Rakhee.Kundu@nmims.edu

2. Mr. Suranjan Das, TechMahindra Pvt. Ltd., Mumbai

Email ID: suranjandas2011@gmail.com