## Internship on ML and Deep Learning

## Objective

Due to the feasibility of collecting huge data from different image acquisition sources, there are many possibilities of using Machine learning, Deep learning and the Computational Intelligence to interpret and to hunt knowledge from the collected data. The workshop aims in consolidating the experimental results integrating the Machine Learning, Deep Learning and Computational Intelligence for freely available datasets. The aim of the workshop is to float relevant information, knowledge and hidden concepts about building Deep Model from scratch. The workshop targets the audience in form of U.G. and P.G. students, faculties and research scholars who want to work in the field of image computations, to enhance their skills sets.

The topics which will be included in the internship are given as:

- Introduction of ML
- Basics of ML
- Mathematics behind ML
- Building components of ML
- Learning Perspective in ML
- Classification and Clustering
- Regression and Predictions
- Neural Networks
- Basic building blocks of Deep Learning
- Introduction about Convolution Layer-their roles and applications
- Theoretical foundation of layered structure of Deep Models
- Image Classification with Convolution Neural Network (CNN)
- Introduction of Google Co-Lab and how to build an application on Co-Lab
- Live Project