



**NARASARAOPETA ENGINEERING COLLEGE**

**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**2023-2024**

<b>BATCH NUMBER</b>	AB3
<b>TEAM MEMBERS</b>	G.DEVUDUBABU (20471A0519) M.MANOJ (20471A0536) SK.ABDUL KHAYUM (20471A0552)
<b>GUIDE</b>	K.V. NARASIMHA REDDY SIR
<b>TITLE</b>	Predicting Liver Disease Through ML Classification Methods
<b>DOMAIN/TECHNO LOGY</b>	MACHINE LEARNING
<b>BASE PAPER LINK</b>	<a href="https://ieeexplore.ieee.org/abstract/document/9787574">https://ieeexplore.ieee.org/abstract/document/9787574</a>
<b>DATASET LINK</b>	<a href="https://www.kaggle.com/datasets/uciml/indian-liver-patient-records">https://www.kaggle.com/datasets/uciml/indian-liver-patient-records</a> <a href="http://archive.ics.uci.edu/dataset/225/ilpd+indian+liver+patient+dataset">http://archive.ics.uci.edu/dataset/225/ilpd+indian+liver+patient+dataset</a>
<b>SOFTWARE REQUIREMENTS</b>	Browser: Any latest browser like Chrome Operating System: Windows 7 Server or later Python (COLAB)

<b>HARDWARE REQUIREMENTS</b>	Processor: Intel® Dual Core 2.0GHz minimum Hard Disk: 1TB minimum RAM: 8GB or more
<b>ABSTRACT</b>	<p>Machine Learning is a process which is used to discover patterns in huge data/ large data set to enable decision, thereby allowing machines to go through a learning process (i.e. supervised, unsupervised and semi-supervised or reinforced). The data set used in this paper is Liver Patient taken from UCI Repository (i.e. Supervised Learning). There is a plenty of data on patients undergoing medical examination at hospitals and these data has been extracted on liver patients whose information can be further used for future improvement of their conditions. In other words, historical and classified input of patients and output data is fed into various algorithms or classifiers for predicting the future data of patients. The algorithms used here for predicting liver patients are Logistic regression, Decision Tree, Random Forest, KNNeighbor, Gradient Boosting, Extreme Gradient Boosting, LightGB. Based on the analysis and result calculations, it was found that these algorithm has obtained good accuracy after feature selection.</p> <p>.</p>