NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Batch Number	AG4
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Guide	Dr.Rama Krishna Eluri M.Tech.,Ph.D.
Title	Classification and Feature Selection Method for Medical Datasets by BGEO TVFL(Binary golden eagle optimization-Time Varying Flight length) and KNN(k-nearest neighbour)
Domain/Technology	MACHINE LEARNING
Base Paper Link	https://www.sciencedirect.com/science/article/abs/pii/S0950705122003628
Dataset Link	https://drive.google.com/drive/folders/1DTMgRpc2XVnbVxZogjN3cxpN4pfSS7QH?usp=drive_link Downloaded From :Kaggle.com
Software Requirements	Browser: Any latest browser like Chrome Operating System: Windows 8 Server or later Python (COLAB)
Hardware Requirements	System Type: Intel Core i5 or above RAM: 8 GB Number of cores:5 Number of Threads: 4
Abstract	Classification accuracy and feature selection are important steps in medical data analysis to identify suitable features that can improve the performance of machine learning models In this study, we present a new method called BGEO TVFL (Binary Golden Eagle Optimization-Time Varying Flight Length) algorithm together is proposed for its K-nearest neighbour (KNN) algorithm. The TVFL algorithm feature of BGEO is used for optimal subset selection, while the KNN algorithm is used for classification. The proposed method is tested in several projects. The experimental results show that the proposed method outperforms other existing methods such as BWOA, BGWO, ACO, and ABC in terms of accuracy and selected features. Our results show that BGEO TVFL outperforms other algorithms in terms of accuracy and feature selection, achieving higher classification accuracy and selecting fewer features compared to how BGEO TVFL performs well as a good optimization algorithm for feature selection and classification in medical data sets

Signature of the student(s) **Signature of the Guide** **Signature of the project coordinator**