

LifeGuardAI-Artificial Intelligence for Predicting Mortality Due to Sepsis

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Abstract: *The LifeGuardAI project is a groundbreaking initiative that aims to utilize artificial intelligence to predict mortality rates associated with sepsis. The project utilizes Multilayer Perceptron (MLP) models and collaborative AI development techniques to provide healthcare professionals with advanced, AI-driven insights for preemptive intervention, ultimately enhancing patient-centered care. The project framework involves a comprehensive approach that begins with defining the problem statement focused on leveraging AI to improve sepsis-related outcomes. The dataset for this project is sourced from the Kaggle Prediction of Sepsis dataset, which contains crucial information related to patient health, such as vital signs, laboratory values, and demographic information*

Keywords: LifeGuardAI, Multilayer Perceptron (MLP), sepsis mortality, Kaggle Prediction of Sepsis dataset, vital signs, laboratory values, demographics, F1 score, accuracy, recall, AUC-ROC, MLP Classifier, neural network, parameter tuning, pandas, matplotlib, NumPy, Scikit-learn, patient-centered care, preemptive intervention, critical care, healthcare outcomes, predictive model