Early Sepsis Prediction Project Summary

Project Overview

The **Early Sepsis Prediction Project** aims to revolutionize sepsis management by integrating advanced machine learning models to predict sepsis early. This approach focuses on improving patient outcomes and reducing mortality rates associated with sepsis.

Objectives

1. **Accurate Sepsis Detection**: Utilizing machine learning models to predict sepsis with high accuracy.
2. **Operational Excellence**: Ensuring continuous monitoring and reliability of the ML pipeline, and integrating the solution within clinical workflows.

Key Contributions

RISHAB KHUBA

- Data preprocessing
- Model training on Vertex AI
- Experiment tracking with MLFlow

DERIL RAJU

- Scheduled batch retraining pipeline
- Monitoring & addressing data drift
- GCP handling
- Data pipeline management
- Batch retrain pipeline
- Cloud monitoring

SHARANYA SENTHIL

- Development of predict.py
- Developing Streamlit.py
- Data stratification

HRITHIK SARDA

- Initial model training
- Hyperparameter tuning
- Model selection

RAGHAVI DUBE

- README documentation
- Dataset Identification
- Data Profiling

Conclusion

The **Early Sepsis Prediction Project** employs a comprehensive approach ensuring robust and scalable sepsis prediction. The Streamlit UI provides an intuitive interface for clinicians to interact with the model, showcasing its real-world application and enhancing usability in clinical settings.