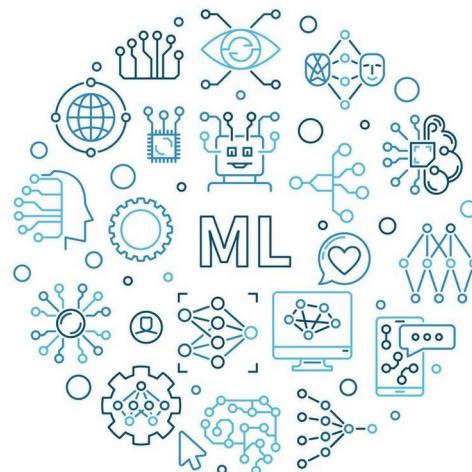


→ *Multiple Disease Prediction Using Machine Learning*...

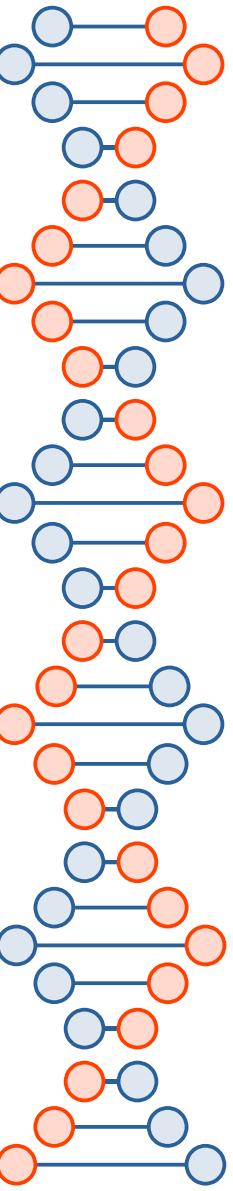


SHIVANI - B200322

MOUNIKA - B200959

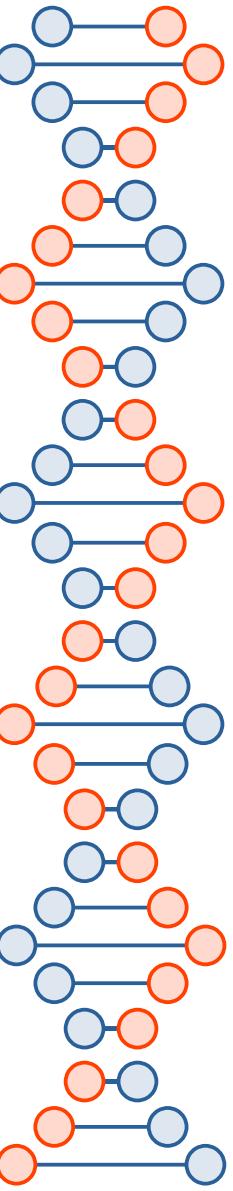
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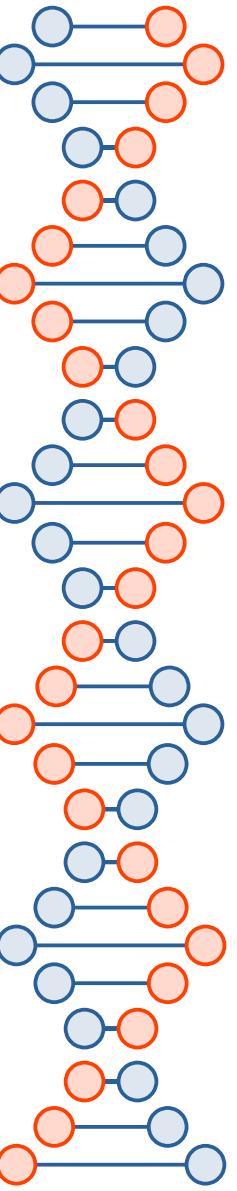
Problem Statement

- In today's fast-paced world, early diagnosis of diseases is crucial for effective treatment.
- Manual diagnosis can be time-consuming, prone to human error, and often lacks accuracy.
- Many individuals suffer from diseases like heart conditions, diabetes, and Parkinson's without early symptoms.
- There is a need for an automated, accurate, and quick prediction system to assist medical professionals and individuals.



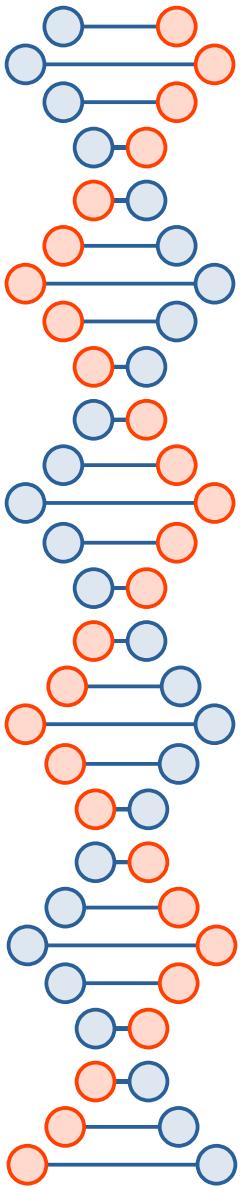
Project Objectives

- To build a machine learning-based system that predicts the likelihood of:
 - ★ Heart Disease
 - ★ Diabetes
 - ★ Parkinson's Disease
- To improve early detection and prevention through predictive analysis.
- To create a user-friendly interface for inputting patient data and displaying prediction results.
- To evaluate the accuracy of different ML models for each disease.



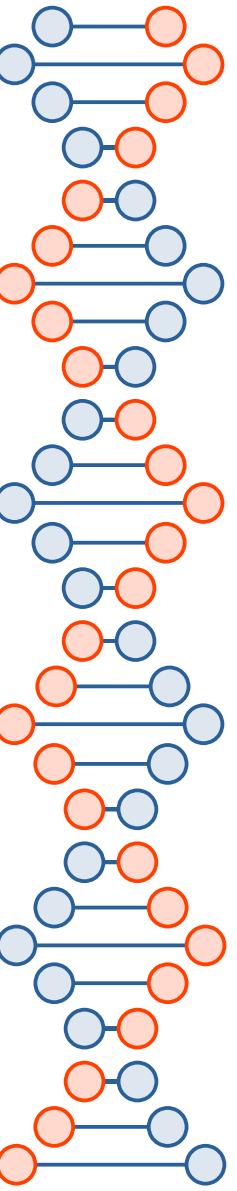
Technologies & Tools Used

- **Programming Language:** Python
- **Libraries :** pandas, numpy, scikit-learn, matplotlib, seaborn
- **ML Models Used :** Logistic Regression, Random Forest, SVM, KNN
- **Dataset Sources :** Kaggle.com
- **Development Platform:** Jupyter Notebook / VS Code
- **Deployment :** Streamlit community



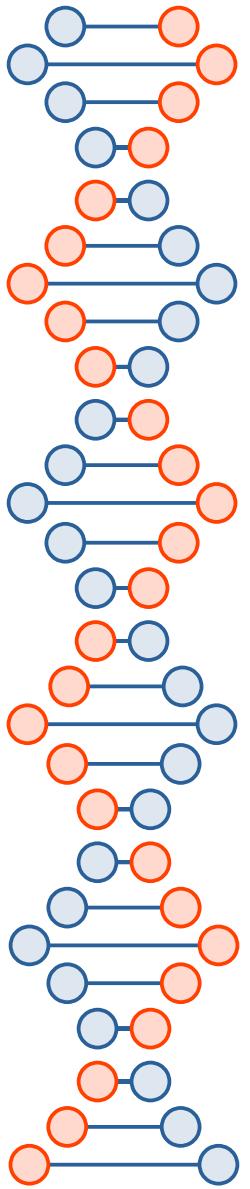
System Architecture / Workflow

- **Input :** Patient medical parameters (like blood pressure, glucose, voice frequency, etc.)
- **Preprocessing:** Cleaning and normalization of data
- **Model Selection:** Use of ML algorithms to train disease-specific models
- **Prediction:** Based on input, predict disease status
- **Output :** Result displayed as Positive / Negative / Probability



Results & Accuracy

Disease		Algorithm		Accuracy
Heart Disease		Random Forest		87%
Diabetes		Logistic Regression		80%
Parkinson's		SVM		90%



Thank you!

