Heart Attack Risk Prediction: Strategies for Improved Patient Outcomes

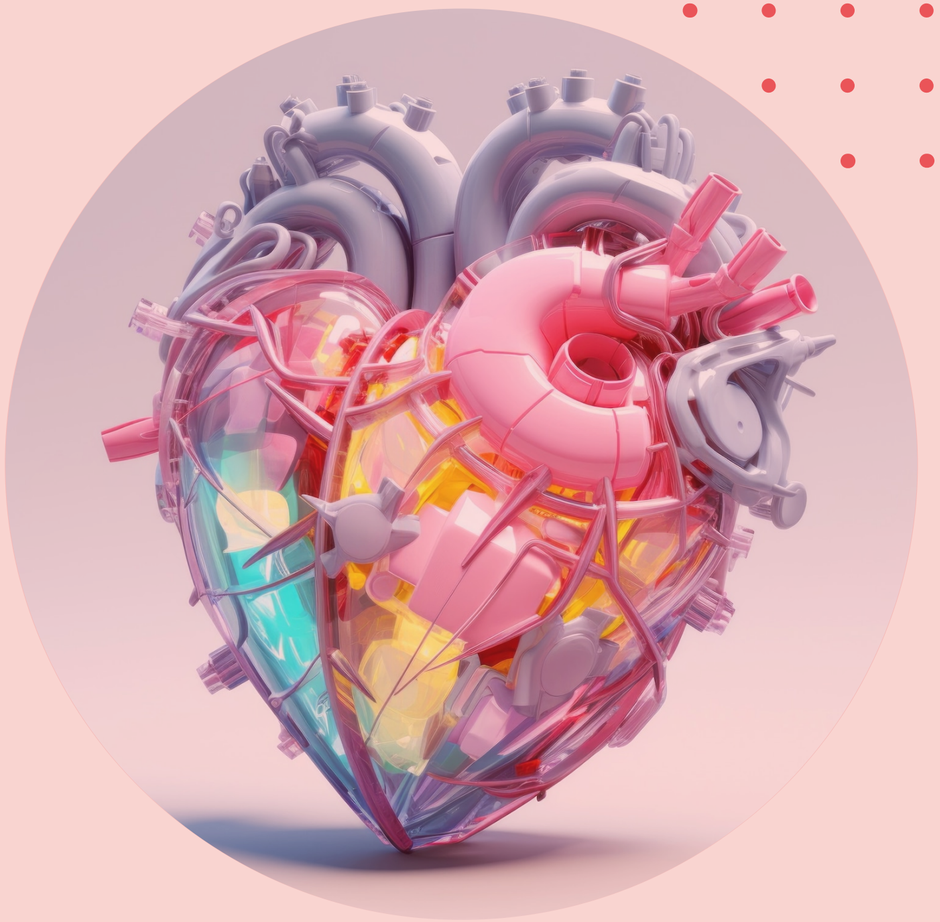
Introduction to Heart Attack Risk

The AI-Powered Heart Attack Risk Prediction system leverages advanced AI and ML techniques to assess cardiovascular risk. It employs predictive analytics on patient health data, using machine learning models to detect early warning signs. The system integrates medical datasets, clinical parameters, and risk factors such as cholesterol levels, blood pressure, and lifestyle habits to provide an accurate risk assessment

Text Stack

Machine Learning Libraries: Scikit-learn for classification and predictive analytics. TensorFlow for deep learning-based risk prediction.

PyTorch for neural network-based cardiovascular modeling.



Frontend: HTML, CSS, and JavaScript for an interactive and dynamic web interface.
Backend: Node.js as a runtime environment for server-side processing. Express to handle API requests efficiently.
Backend Connectivity: Flask to connect the front end with machine learning models. MongoDB for storing patient records and risk assessments.

Conclusion

The system processes medical datasets obtained from sources like Kaggle, training models on diverse patient health parameters. It incorporates statistical analysis and feature engineering to improve prediction accuracy. The model is deployed via Flask as a REST API, allowing real-time assessments on a local or cloud-based server.

Thank You