

CortexAI — Automated Data Science Report

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1. Executive Summary

This report was generated automatically by CortexAI. Learnability Score: **90 / 100**
Verdict: **Strong ML potential**

2. Dataset Overview

Metric	Value
Rows	891
Columns	12
Target Column	Survived
Task Type	classification

3. Feature Schema

Numeric Features	Age, Fare
Ordinal Features	Pclass, SibSp, Parch
Categorical Features	Sex, Embarked
ID Columns	PassengerId

4. Data Cleaning Summary

Key automated cleaning steps applied:

Removed ID Columns	PassengerId
Missing Values Fixed	{'Age': 'filled with median (28.0)', 'Embarked': 'filled with mode (S)'}
Type Casting	{'Age': 'numeric', 'Fare': 'numeric', 'Pclass': 'ordinal', 'SibSp': 'ordinal', 'Parch': 'ordinal'}
Final Dataset Shape	(891, 8)

5. Exploratory Data Analysis (EDA)

- Target distribution: {0: 0.62, 1: 0.38}
- Fare is highly skewed
- Sex shows strong relationship with target

- Embarked shows strong relationship with target

6. Model Training Results

Best Model	
Metric Used	
Best CV Score	

7. Recommendations & Risks

- Models significantly outperform the baseline (+0.35).
- Dataset contains a diverse and informative feature set.