

Loan Risk Prediction Report

Data Exploration Insights

Summary Statistics:

	Id	Income	Age	Experience	CURRENT_JOB_YRS	CURRENT_HOUSE_YRS	Risk_Flag
count	252000.000000	2.520000e+05	252000.000000	252000.000000	252000.000000	252000.000000	252000.000000
mean	126000.500000	4.997117e+06	49.954071	10.084437	6.333877	11.997794	0.123000
std	72746.278255	2.878311e+06	17.063855	6.002590	3.647053	1.399037	0.328438
min	1.000000	1.031000e+04	21.000000	0.000000	0.000000	10.000000	0.000000
25%	63000.750000	2.503015e+06	35.000000	5.000000	3.000000	11.000000	0.000000
50%	126000.500000	5.000694e+06	50.000000	10.000000	6.000000	12.000000	0.000000
75%	189000.250000	7.477502e+06	65.000000	15.000000	9.000000	13.000000	0.000000
max	252000.000000	9.999938e+06	79.000000	20.000000	14.000000	14.000000	1.000000

Missing Values:

Id	0
Income	0
Age	0

Loan Risk Prediction Report

Experience 0

Married/Single 0

House_Ownership 0

Car_Ownership 0

Profession 0

CITY 0

STATE 0

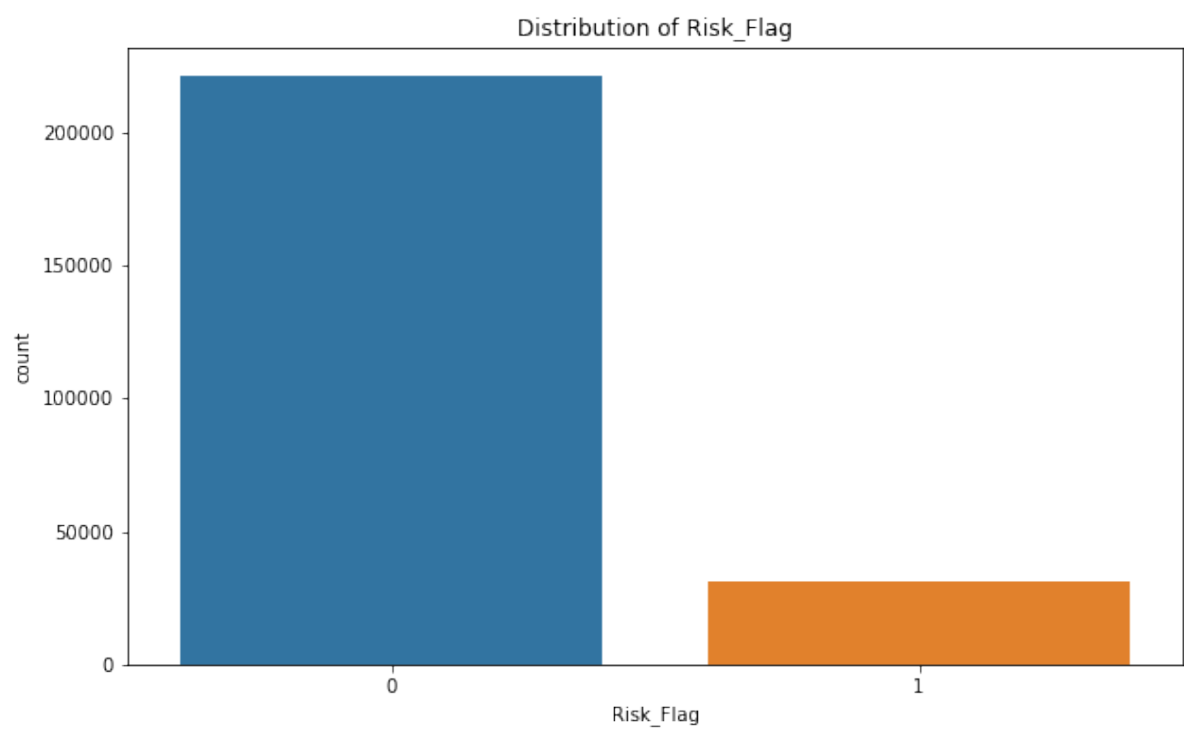
CURRENT_JOB_YRS 0

CURRENT_HOUSE_YRS 0

Risk_Flag 0

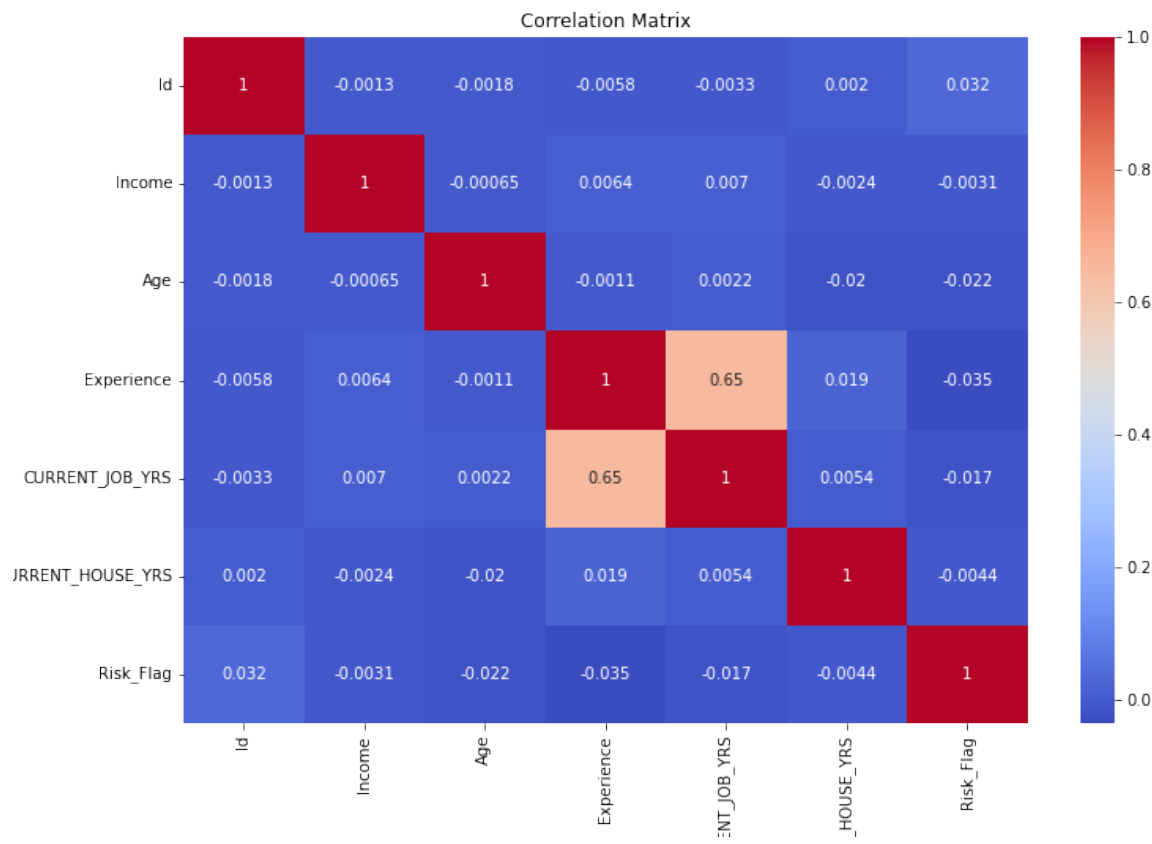
Loan Risk Prediction Report

Distribution of Risk_Flag



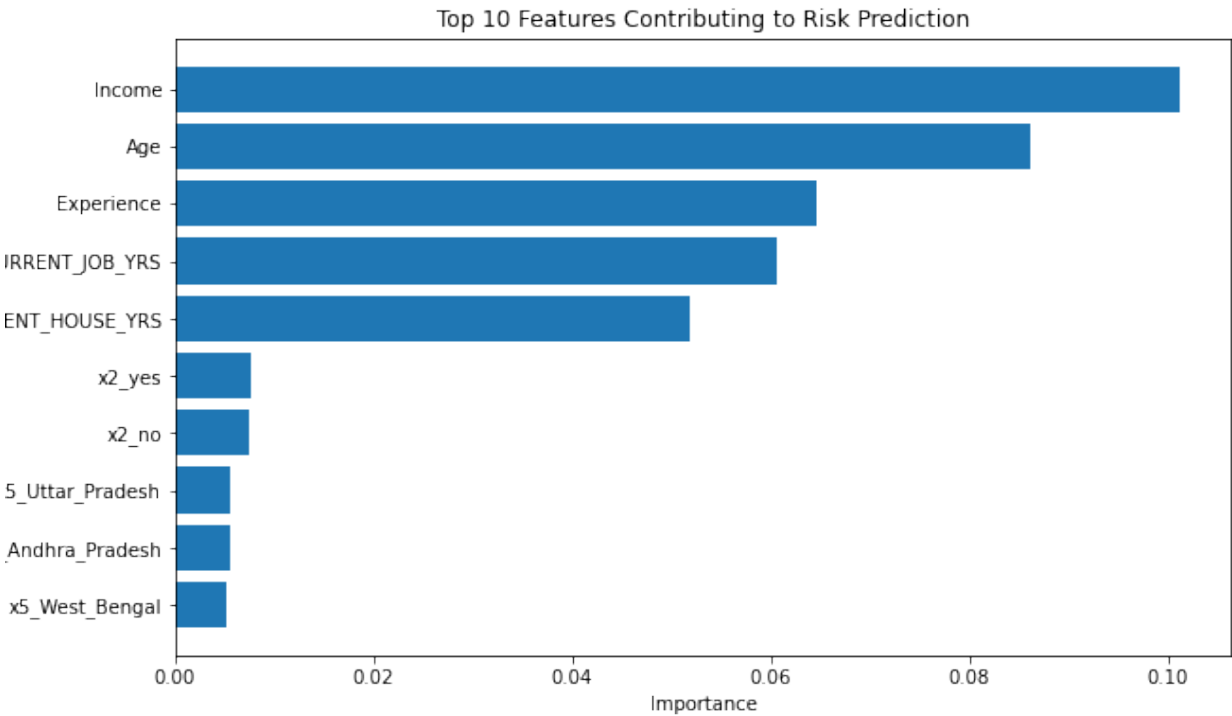
Loan Risk Prediction Report

Correlation Matrix



Loan Risk Prediction Report

Top 10 Features Contributing to Risk Prediction



Loan Risk Prediction Report

Model Performance

Classification Report:

	0	1	accuracy	macro avg	weighted avg
precision	0.935837	0.589998	0.897143	0.762918	0.893300
recall	0.947693	0.536699	0.897143	0.742196	0.897143
f1-score	0.941728	0.562088	0.897143	0.751908	0.895034
support	44201.000000	6199.000000	0.897143	50400.000000	50400.000000

Confusion Matrix:

	0	1
0	41889	2312
1	2872	3327