

Profile Report for Personal Loan Modelling Dataset

Overview

OverviewAlerts 13Reproduction

Dataset statistics

Number of variables	14
Number of observations	5000
Missing cells	0
Missing cells (%)	0.0%
Duplicate rows	0
Duplicate rows (%)	0.0%
Total size in memory	547.0 KiB
Average record size in memory	112.0 B

Variable types

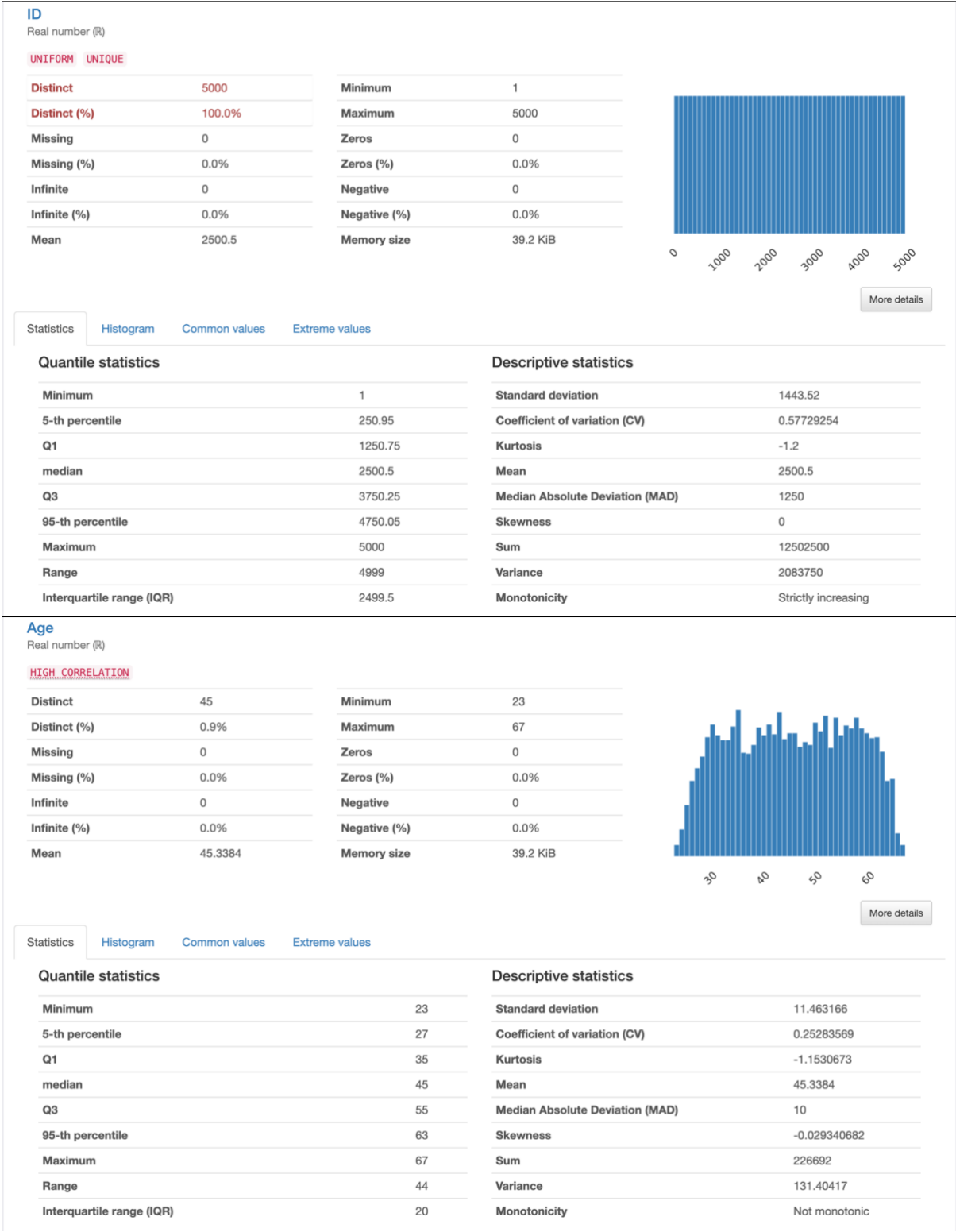
Numeric	7
Categorical	7

OverviewAlerts 13Reproduction

Alerts

Age is highly overall correlated with Experience	High correlation
CCAvg is highly overall correlated with Income	High correlation
Experience is highly overall correlated with Age	High correlation
Income is highly overall correlated with CCAvg and 1 other fields	High correlation
Personal Loan is highly overall correlated with Income	High correlation
Personal Loan is highly imbalanced (54.4%)	Imbalance
Securities Account is highly imbalanced (51.7%)	Imbalance
CD Account is highly imbalanced (67.1%)	Imbalance
ID is uniformly distributed	Uniform
ID has unique values	Unique
Experience has 66 (1.3%) zeros	Zeros
CCAvg has 106 (2.1%) zeros	Zeros
Mortgage has 3462 (69.2%) zeros	Zeros

Variables



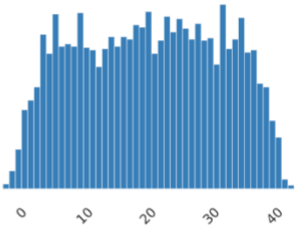
Experience

Real number (R)

HIGH CORRELATION ZEROS

Distinct	47
Distinct (%)	0.9%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	20.1046

Minimum	-3
Maximum	43
Zeros	66
Zeros (%)	1.3%
Negative	52
Negative (%)	1.0%
Memory size	39.2 KiB



More details

Statistics Histogram Common values Extreme values

Quantile statistics

Minimum	-3
5-th percentile	2
Q1	10
median	20
Q3	30
95-th percentile	38
Maximum	43
Range	46
Interquartile range (IQR)	20

Descriptive statistics

Standard deviation	11.467954
Coefficient of variation (CV)	0.57041442
Kurtosis	-1.1215228
Mean	20.1046
Median Absolute Deviation (MAD)	10
Skewness	-0.026324688
Sum	100523
Variance	131.51396
Monotonicity	Not monotonic

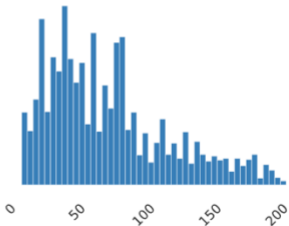
Income

Real number (R)

HIGH CORRELATION

Distinct	162
Distinct (%)	3.2%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	73.7742

Minimum	8
Maximum	224
Zeros	0
Zeros (%)	0.0%
Negative	0
Negative (%)	0.0%
Memory size	39.2 KiB



More details

Statistics Histogram Common values Extreme values

Quantile statistics

Minimum	8
5-th percentile	18
Q1	39
median	64
Q3	98
95-th percentile	170
Maximum	224
Range	216
Interquartile range (IQR)	59

Descriptive statistics

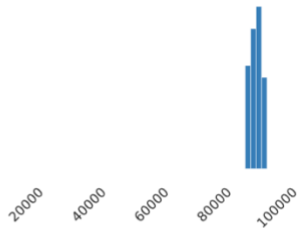
Standard deviation	46.033729
Coefficient of variation (CV)	0.62398141
Kurtosis	-0.04424419
Mean	73.7742
Median Absolute Deviation (MAD)	29
Skewness	0.84133861
Sum	368871
Variance	2119.1042
Monotonicity	Not monotonic

ZIP Code

Real number (R)

Distinct	467
Distinct (%)	9.3%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	93152.503

Minimum	9307
Maximum	96651
Zeros	0
Zeros (%)	0.0%
Negative	0
Negative (%)	0.0%
Memory size	39.2 KiB



More details

Statistics

Histogram

Common values

Extreme values

Quantile statistics

Minimum	9307
5-th percentile	90072.9
Q1	91911
median	93437
Q3	94608
95-th percentile	95670
Maximum	96651
Range	87344
Interquartile range (IQR)	2697

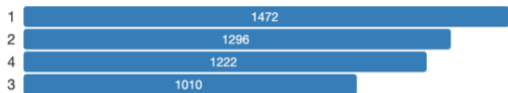
Descriptive statistics

Standard deviation	2121.8522
Coefficient of variation (CV)	0.022778263
Kurtosis	486.20427
Mean	93152.503
Median Absolute Deviation (MAD)	1328
Skewness	-12.500221
Sum	4.6576252×10^8
Variance	4502256.7
Monotonicity	Not monotonic

Family

Categorical

Distinct	4
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview

Categories

Words

Characters

Common Values

Value	Count	Frequency (%)
1	1472	29.4%
2	1296	25.9%
4	1222	24.4%
3	1010	20.2%

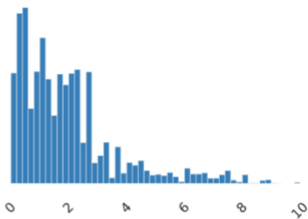
CCAvg

Real number (R)

HIGH CORRELATION ZEROS

Distinct	108
Distinct (%)	2.2%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	1.937938

Minimum	0
Maximum	10
Zeros	106
Zeros (%)	2.1%
Negative	0
Negative (%)	0.0%
Memory size	39.2 KiB



More details

Statistics Histogram Common values Extreme values

Quantile statistics

Minimum	0
5-th percentile	0.1
Q1	0.7
median	1.5
Q3	2.5
95-th percentile	6
Maximum	10
Range	10
Interquartile range (IQR)	1.8

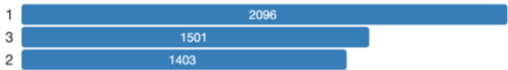
Descriptive statistics

Standard deviation	1.747659
Coefficient of variation (CV)	0.90181367
Kurtosis	2.6467064
Mean	1.937938
Median Absolute Deviation (MAD)	0.9
Skewness	1.5984433
Sum	9689.69
Variance	3.0543119
Monotonicity	Not monotonic

Education

Categorical

Distinct	3
Distinct (%)	0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview Categories Words Characters

Common Values

Value	Count	Frequency (%)
1	2096	41.9%
3	1501	30.0%
2	1403	28.1%

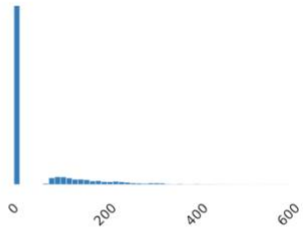
Mortgage

Real number (R)

ZEROS

Distinct	347
Distinct (%)	6.9%
Missing	0
Missing (%)	0.0%
Infinite	0
Infinite (%)	0.0%
Mean	56.4988

Minimum	0
Maximum	635
Zeros	3462
Zeros (%)	69.2%
Negative	0
Negative (%)	0.0%
Memory size	39.2 KiB



More details

Statistics Histogram Common values Extreme values

Quantile statistics

Minimum	0
5-th percentile	0
Q1	0
median	0
Q3	101
95-th percentile	272
Maximum	635
Range	635
Interquartile range (IQR)	101

Descriptive statistics

Standard deviation	101.7138
Coefficient of variation (CV)	1.8002825
Kurtosis	4.7567967
Mean	56.4988
Median Absolute Deviation (MAD)	0
Skewness	2.1040023
Sum	282494
Variance	10345.698
Monotonicity	Not monotonic

Personal Loan

Categorical

HIGH CORRELATION IMBALANCE

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview Categories Words Characters

Common Values

Value	Count	Frequency (%)
0	4520	90.4%
1	480	9.6%

Securities Account

Categorical

IMBALANCE

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview Categories Words Characters

Common Values

Value	Count	Frequency (%)
0	4478	89.6%
1	522	10.4%

CD Account

Categorical

IMBALANCE

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview

Categories

Words

Characters

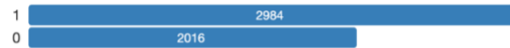
Common Values

Value	Count	Frequency (%)
0	4698	94.0%
1	302	6.0%

Online

Categorical

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview

Categories

Words

Characters

Common Values

Value	Count	Frequency (%)
1	2984	59.7%
0	2016	40.3%

CreditCard

Categorical

Distinct	2
Distinct (%)	< 0.1%
Missing	0
Missing (%)	0.0%
Memory size	39.2 KiB



More details

Overview

Categories

Words

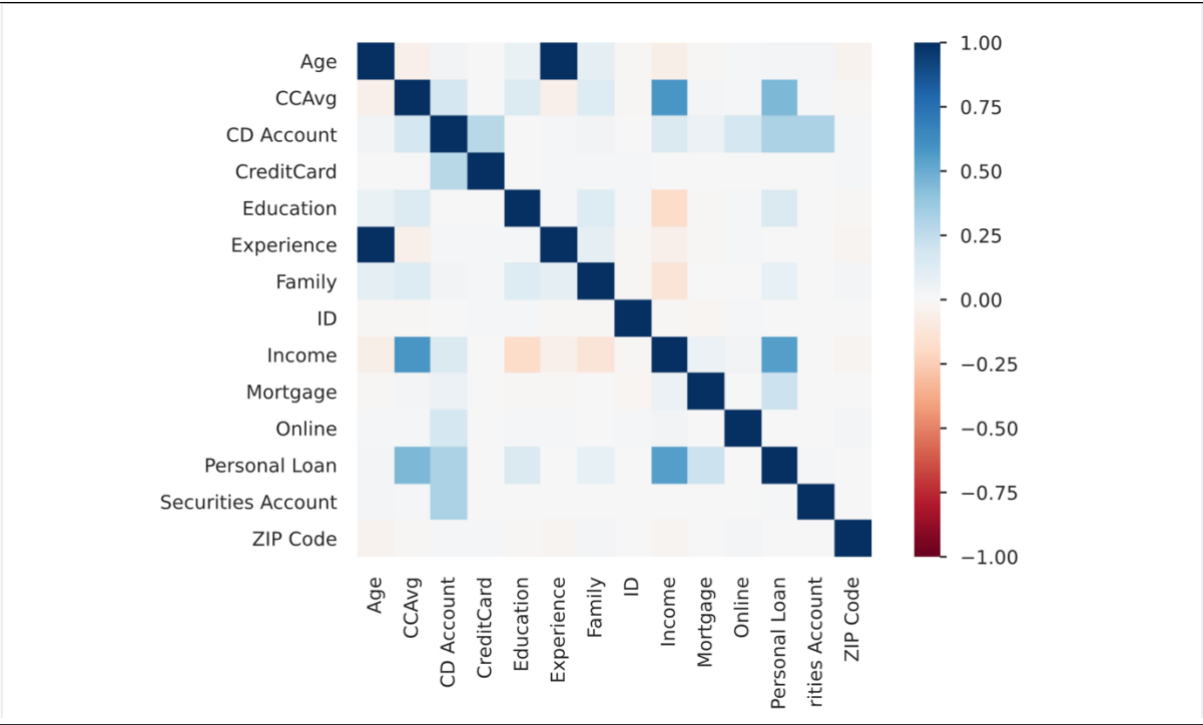
Characters

Common Values

Value	Count	Frequency (%)
0	3530	70.6%
1	1470	29.4%

Correlations

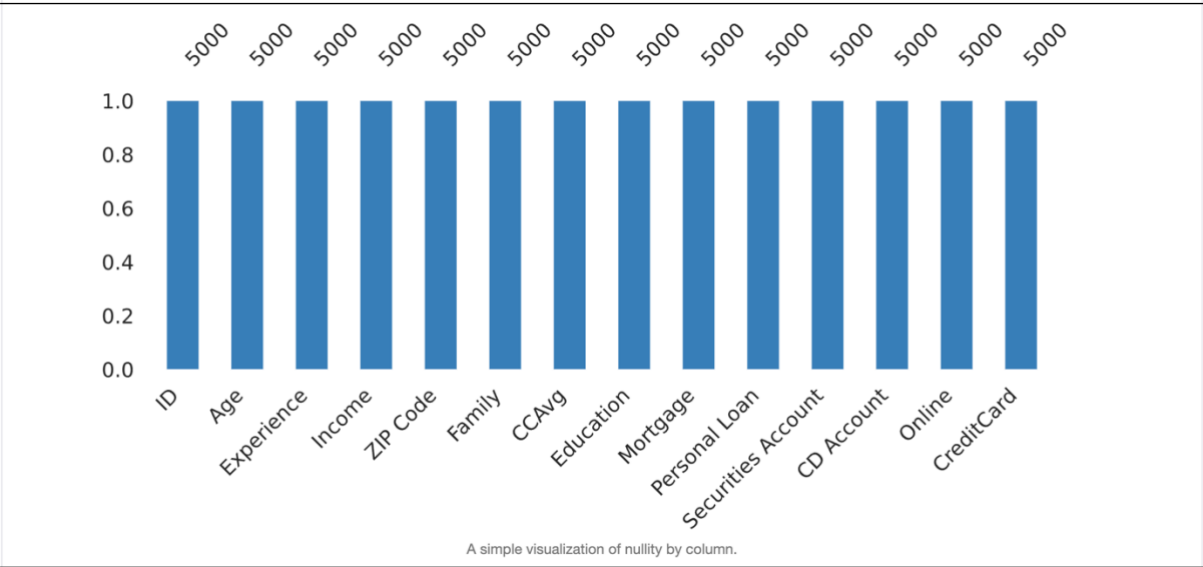
Heatmap



Table

	Age	CCAvg	CD Account	CreditCard	Education	Experience	Family	ID	Income	Mortgage	Online	Personal Loan
Age	1.000	-0.050	0.036	0.000	0.069	0.994	0.094	-0.009	-0.057	-0.011	0.020	0.030
CCAvg	-0.050	1.000	0.174	0.000	0.139	-0.051	0.125	-0.014	0.580	0.024	0.019	0.448
CD Account	0.036	0.174	1.000	0.277	0.000	0.009	0.038	-0.007	0.141	0.056	0.174	0.315
CreditCard	0.000	0.000	0.277	1.000	0.000	0.008	0.013	0.017	-0.003	-0.004	0.000	0.000
Education	0.069	0.139	0.000	0.000	1.000	0.013	0.128	0.021	-0.183	-0.012	0.018	0.148
Experience	0.994	-0.051	0.009	0.008	0.013	1.000	0.097	-0.008	-0.050	-0.009	0.022	0.000
Family	0.094	0.125	0.038	0.013	0.128	0.097	1.000	-0.015	-0.133	-0.001	0.000	0.073
ID	-0.009	-0.014	-0.007	0.017	0.021	-0.008	-0.015	1.000	-0.015	-0.019	0.023	0.003
Income	-0.057	0.580	0.141	-0.003	-0.183	-0.050	-0.133	-0.015	1.000	0.061	0.038	0.550
Mortgage	-0.011	0.024	0.056	-0.004	-0.012	-0.009	-0.001	-0.019	0.061	1.000	0.000	0.218
Online	0.020	0.019	0.174	0.000	0.018	0.022	0.000	0.023	0.038	0.000	1.000	0.000
Personal Loan	0.030	0.448	0.315	0.000	0.148	0.000	0.073	0.003	0.550	0.218	0.000	1.000
Securities Account	0.025	0.016	0.315	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015
ZIP Code	-0.031	-0.015	0.021	0.022	-0.010	-0.031	0.026	0.002	-0.031	0.006	0.029	-0.000

Missing Value



Sample

	ID	Age	Experience	Income	ZIP Code	Family	CCAvg	Education	Mortgage	Personal Loan	Securities Account	CD Account	Online	CreditCard
0	1	25	1	49	91107	4	1.6	1	0	0	1	0	0	0
1	2	45	19	34	90089	3	1.5	1	0	0	1	0	0	0
2	3	39	15	11	94720	1	1.0	1	0	0	0	0	0	0
3	4	35	9	100	94112	1	2.7	2	0	0	0	0	0	0
4	5	35	8	45	91330	4	1.0	2	0	0	0	0	0	1
5	6	37	13	29	92121	4	0.4	2	155	0	0	0	1	0
6	7	53	27	72	91711	2	1.5	2	0	0	0	0	1	0
7	8	50	24	22	93943	1	0.3	3	0	0	0	0	0	1
8	9	35	10	81	90089	3	0.6	2	104	0	0	0	1	0
9	10	34	9	180	93023	1	8.9	3	0	1	0	0	0	0