Dataset "Predict students' dropout and academic success"
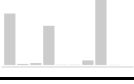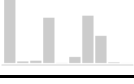
The dataset includes information known at the time of student enrollment (academic path, demographics, and Macro-economics and Socio-economics factors) and the student's academic performance at the end of the first and second semesters.
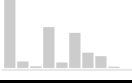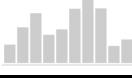
The data is used to build classification models to predict students' dropout and academic success.

The problem is formulated as a three-category classification task (dropout, enrolled, and graduate) at the end of the normal duration of the course.

The dataset contained 4,424 records (without missing values) and with 35 variables, where each record represents an individual student.

Move the mouse over the name of the variable to get description of possible values.

Group	Variable	Histogram	Mean	Median	Coefficient of variation	Min.	Max.
Demographic data	Marital status (numeric/discrete)		1.180	1	0.510	1	6
Demographic data	Nationality (numeric/discrete)		1.250	1	1.390	1	21
Demographic data	Displaced (numeric/binary)		0.548	1	0.907	0	1
Demographic data	Gender (numeric/binary)		0.352	0	1.358	0	1
Demographic data	Age at enrollment (numeric/discrete)		23.130	20	0.320	17	70
Demographic data	International (numeric/binary)		0.025	0	6.262	0	1
Socio-economic data	Father's qualification (numeric/discrete)		16.460	14	0.670	1	34
Socio-economic data	Mother's qualification (numeric/discrete)		12.320	13	0.730	1	29
Socio-economic data	Father's occupation (numeric/discrete)		7.820	8	0.620	1	46
Socio-economic data	Mother's occupation (numeric/discrete)		7.320	6	0.550	1	32
Socio-economic data	Educational special needs (numeric/binary)			0	0.0644		
Socio-economic data	Debtor (numeric/binary)		0.012	0	9.260	0	1

Category	Feature	Histogram	Mean	Median	Std	Min	Max
Socio-economic data	Tuition fees up to date (numeric/binary)		0.881	1	0.368	0	1
Socio-economic data	Scholarship holder (numeric/binary)		0.248	0	1.739	0	1
Macro-economic data	Unemployment rate (numeric/continous)		11.566	11.100	0.230	7.600	16.200
Macro-economic data	Inflation rate (numeric/continous)		1.228	1.400	1.126	-0.800	3.700
Macro-economic data	GDP (numeric/continous)		0.002	0.320	1,152.820	-4.100	3.500
Academic data at enrollment	Application mode Application mode (numeric/discrete)		6.890	8	0.770	1	18
Academic data at enrollment	Application order (numeric/ordinal)		1.730	1	0.760	1	9
Academic data at enrollment	Course (numeric/discrete)		9.900	10	0.440	1	17
Academic data at enrollment	Daytime/evening attendance (numeric/discrete)		0.891	1	0.350	0	1
Academic data at enrollment	Previous qualification (numeric/discrete)		2.530	1	1.570	1	17
Academic data at the end of 1st semester	Curricular units 1st sem (credited) (numeric/discrete)		0.710	0	3.320	0	20
Academic data at the end of 1st semester	Curricular units 1st sem (enrolled) (numeric/discrete)		6.270	6	0.400	0	26
Academic data at the end of 1st semester	Curricular units 1st sem (evaluations) (numeric/discrete)		8.300	8	0.500	0	45
Academic data at the end of 1st semester	Curricular units 1st sem (approved) (numeric/discrete)		4.710	5	0.660	0	26
Academic data at the end of 1st semester	Curricular units 1st sem (grade) (numeric/continous)		10.641	12.286	0.455	0.000	18.8875
Academic data at the end of 1st semester	Curricular units 1st sem (without evaluations) (numeric/discrete)		0.140	0	5.020	0	12
Academic data at the end of 2nd semester	Curricular units 2nd sem (credited) (numeric/discrete)		0.540	0	3.540	0	19
Academic data at the end of 2nd semester	Curricular units 2nd sem (enrolled) (numeric/discrete)		6.230	6	0.350	0	23

Category	Feature	Histogram					
Academic data at the end of 2nd semester	Curricular units 2nd sem (evaluations) (numeric/discrete)		8.060	8	0.490	0	33
Academic data at the end of 2nd semester	Curricular units 2nd sem (approved) (numeric/discrete)		4.440	5	0.680	0	20
Academic data at the end of 2nd semester	Curricular units 2nd sem (grade) (numeric/continous)		10.230	12.200	0.509	0.000	18.571
Academic data at the end of 2nd semester	Curricular units 2nd sem (without evaluations) (numeric/discrete)		0.150	0	5.010	0	12
Target	Target (categorical)			Graduate	1.02		