DatasetConfirmation

DatasetHead

Candidate State	Age Range	Sex	Study area	Study Title	Years Experience	Sector	event_typev al	Expected Ral	Residence State	Residence Italian Region	European Residence
Hired	early 30s	Male	Automation/Me chatronics Engineering	Five-year degree	between 1 and 3	Automotive	BM interview	24-26 K	ITALY	Piedmont	Yes
Vivier	early 40s	Female	computer engineering	Five-year degree	between 7 and 10	Aeronautics	Candidate notification	26-28 K	ITALY	Puglia	Yes
QM	late 30s	Male	chemical engineering	Five-year degree	between 3 and 5	Consulting	Qualification Meeting	Not Given	ITALY	Campania	Yes
QM	more than 45 years	Male	Legal	Five-year degree	between 7 and 10	Telecom	Qualification Meeting	20-22 K	ITALY	Lombardy	Yes
In selection	early 30s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Automotive	BM interview	24-26 K	ITALY	Sicily	Yes
In selection	late 30s	Male	Telecommunic ations Engineering	Five-year degree	between 3 and 5	Telecom	Technical interview	28-30 K	ITALY	Lombardy	Yes
Hired	early 30s	Female	Economic - Statistics	Five-year degree	between 5 and 7	Others	HR interview	22-24 K	ITALY	Piedmont	Yes
Vivier	late 30s	Male	Materials Science and Engineering	Five-year degree	between 5 and 7	Space	BM interview	30-32 K	ITALY	Lazio	Yes
Hired	late 30s	Male	Other scientific subjects	Five-year degree	between 1 and 3	Life sciences	BM interview	28-30 K	ITALY	Marche	Yes
First contact	late 30s	Male	Biomedical Engineering	Five-year degree	between 5 and 7	Not Specified	CV request	Not Given	ITALY	Sardinia	Yes
In selection	early 40s	Male	electronic Engineering	Five-year degree	between 3 and 5	Not Specified	Contact note	Not Given	ITALY	Tuscany	Yes
Hired	late 30s	Male	electronic Engineering	Five-year degree	between 3 and 5	Consulting	BM interview	20-22 K	ITALY	Abruzzo	Yes
Hired	late 30s	Female	Telecommunic ations Engineering	Doctorate	more than 10	Others	Candidate notification	Not Given	ITALY	Tuscany	Yes
In selection	early 30s	Male	Information Engineering	Five-year degree	between 3 and 5	Others	HR interview	44-46 K	ITALY	Puglia	Yes
Hired	early 40s	Male	Automation/Me chatronics Engineering	Five-year degree	between 5 and 7	Others	HR interview	Not Given	ITALY	Tuscany	Yes

Hired	early 30s	Male	Information Engineering	Five-year degree	between 3 and 5	Consulting	CV request	Not Given	ITALY	Lazio	Yes
In selection	early 30s	Male	Telecommunic ations Engineering	Five-year degree	between 5 and 7	Telecom	CV request	40-42 K	ITALY	Tuscany	Yes
Hired	early 30s	Male	Information Engineering	Five-year degree	between 1 and 3	Others	BM interview	Not Given	ITALY	Puglia	Yes
Hired	early 30s	Male	Automation/Me chatronics Engineering	Five-year degree	between 1 and 3	Consulting	BM interview	32-34 K	ITALY	Sicily	Yes
QM	early 30s	Male	Telecommunic ations Engineering	Five-year degree	between 5 and 7	Aeronautics	Inadequate CV	Not Given	ITALY	Tuscany	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 3 and 5	Not Specified	Candidate notification	Not Given	ITALY	Tuscany	Yes
Hired	early 30s	Male	electronic Engineering	Five-year degree	between 1 and 3	Others	BM interview	24-26 K	ITALY	Tuscany	Yes
Hired	early 30s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 3 and 5	Space	Candidate notification	34-36 K	GERMANY	Not Italian Region	Yes
Hired	more than 45 years	Male	Other scientific subjects	High school graduation	more than 10	Railway	HR interview	32-34 K	ITALY	Emilia Romagna	Yes
Economic proposal	early 30s	Male	Automation/Me chatronics Engineering	Five-year degree	none	Others	Economic proposal	Not Given	ITALY	Tuscany	Yes
Hired	early 30s	Male	Automation/Me chatronics Engineering	Five-year degree	between 1 and 3	Defence	BM interview	Not Given	ITALY	Tuscany	Yes
In selection	early 30s	Male	Information Engineering	Five-year degree	between 3 and 5	Not Specified	BM interview	Not Given	ITALY	Tuscany	Yes
In selection	early 30s	Female	Biomedical Engineering	Five-year degree	between 3 and 5	Life sciences	Contact note	Not Given	ITALY	Tuscany	Yes
Hired	early 30s	Male	electronic Engineering	Three-year degree	between 5 and 7	Not Specified	HR interview	Not Given	ITALY	Emilia Romagna	Yes
In selection	late 20s	Female	Biomedical Engineering	Three-year degree	between 0 and	Not Specified	Contact note	Not Given	ITALY	Puglia	Yes
QM	early 30s	Male	Automation/Me chatronics Engineering	Five-year degree	between 0 and 1	Naval	Contact note	Not Given	ITALY	Tuscany	Yes
Hired	early 30s	Female	Automation/Me chatronics Engineering	Five-year degree	between 5 and 7	Others	BM interview	Not Given	ITALY	Tuscany	Yes

First contact	early 30s	Female	Telecommunic ations Engineering	Three-year degree	between 0 and 1	Not Specified	CV request	Not Given	ITALY	Sardinia	Yes
First contact	late 20s	Female	computer engineering	Three-year degree	between 5 and 7	Not Specified	CV request	Not Given	ITALY	Tuscany	Yes
In selection	late 20s	Male	Biomedical Engineering	Five-year degree	none	Others	Technical interview	Not available	ITALY	Sicily	Yes
Hired	early 30s	Male	electronic Engineering	Three-year degree	between 1 and 3	Consulting	BM interview	28-30 K	ITALY	Lazio	Yes
Hired	early 40s	Male	Automation/Me chatronics Engineering	Five-year degree	more than 10	Consulting	BM interview	+ 50 K	ITALY	Lombardy	Yes
In selection	late 20s	Male	Mechanical engineering	Five-year degree	between 1 and 3	Automotive	CV request	Not Given	ITALY	Piedmont	Yes
In selection	early 30s	Male	Mechanical engineering	Five-year degree	between 0 and 1	Not Specified	CV request	Not Given	ITALY	Piedmont	Yes
In selection	early 30s	Female	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 3 and 5	Space	Candidate notification	Not Given	ITALY	Piedmont	Yes
Hired	early 30s	Male	Mechanical engineering	Five-year degree	between 0 and 1	Not Specified	Qualification Meeting	Not Given	ITALY	Piedmont	Yes
Hired	early 30s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 1 and 3	Aeronautics	Research association	28-30 K	ITALY	Piedmont	Yes
Hired	early 30s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Space	BM interview	30-32 K	ITALY	Piedmont	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 3 and 5	Others	BM interview	Not Given	ITALY	Piedmont	Yes
QM	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 5 and 7	Not Specified	Qualification Meeting	28-30 K	ITALY	Puglia	Yes
First contact	early 30s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Automotive	CV request	Not available	ITALY	Puglia	Yes
In selection	early 30s	Male	computer engineering	Five-year degree	between 3 and 5	Not Specified	Contact note	Not Given	ITALY	Piedmont	Yes
In selection	early 30s	Male	electronic Engineering	Doctorate	between 3 and 5	Not Specified	CV request	Not Given	ITALY	Piedmont	Yes
First contact	late 30s	Male	Mechanical engineering	Five-year degree	between 5 and 7	Others	CV request	Not available	ITALY	Piedmont	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 0 and 1	Telecom	BM interview	26-28 K	ITALY	Puglia	Yes

Hired	late 20s	Male	Automation/Me chatronics Engineering	Five-year degree	between 1 and 3	Automotive	BM interview	34-36 K	ITALY	Tuscany	Yes
In selection	early 30s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Others	Candidate notification	Not Given	ITALY	Lombardy	Yes
First contact	early 30s	Male	Biomedical Engineering	Five-year degree	between 3 and 5	Life sciences	Contact note	40-42 K	ITALY	Piedmont	Yes
Hired	early 30s	Male	electronic Engineering	Five-year degree	none	Others	Sending SC to customer	Not Given	ITALY	Abruzzo	Yes
In selection	late 20s	Male	Energy and Nuclear Engineering	Five-year degree	between 3 and 5	Railway	HR interview	Not Given	ITALY	Emilia Romagna	Yes
Hired	early 40s	Male	computer engineering	Five-year degree	more than 10	Telecom	HR interview	36-38 K	ITALY	Lombardy	Yes
Hired	early 40s	Male	electronic Engineering	Five-year degree	between 5 and 7	Defence	BM interview	36-38 K	ITALY	Tuscany	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 0 and 1	Automotive	Sending SC to customer	26-28 K	ITALY	Puglia	Yes
In selection	less than 20 years	Male	computer engineering	Five-year degree	between 1 and 3	Automotive	Contact note	34-36 K	ITALY	Liguria	Yes
Economic proposal	early 30s	Female	Biomedical Engineering	Five-year degree	between 5 and 7	Life sciences	Contact note	Not available	ITALY	Abruzzo	Yes
In selection	more than 45 years	Male	Informatics	High school graduation	more than 10	Defence	Candidate notification	48-50 K	ITALY	Abruzzo	Yes
Hired	late 30s	Male	Informatics	High school graduation	more than 10	Life sciences	BM interview	40-42 K	ITALY	Emilia Romagna	Yes
Hired	early 30s	Male	Aeronautical/A erospace/Astro nautics Engineering	'master"s degree'	between 3 and 5	Others	Technical interview	Not Given	ITALY	Campania	Yes
In selection	late 20s	Female	Management Engineering	Three-year degree	none	Not Specified	Contact note	Not Given	ITALY	Piedmont	Yes
In selection	late 20s	Male	Biomedical Engineering	Three-year degree	between 3 and 5	Life sciences	HR interview	Not Given	ITALY	Sicily	Yes
In selection	late 20s	Male	Automation/Me chatronics Engineering	Five-year degree	between 3 and 5	Others	Contact note	Not Given	ITALY	Puglia	Yes
Hired	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 1 and 3	Not Specified	BM interview	Not Given	ITALY	Piedmont	Yes
Hired	late 20s	Male	Automotive Engineering	Five-year degree	between 0 and	Others	BM interview	Not Given	ITALY	Marche	Yes

In selection	early 30s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	none	Not Specified	Contact note	Not Given	ITALY	Piedmont	Yes
In selection	late 20s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Automotive	CV request	Not available	ITALY	Campania	Yes
In selection	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 3 and 5	Others	BM interview	Not Given	ITALY	Piedmont	Yes
Hired	early 30s	Female	Management Engineering	Five-year degree	none	Not Specified	BM interview	Not Given	ITALY	Piedmont	Yes
Hired	late 30s	Male	Mechanical engineering	Three-year degree	none	Others	BM interview	Not Given	ITALY	Friuli Venezia Giulia	Yes
In selection	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Three-year degree	between 3 and 5	Aeronautics	BM interview	Not available	ITALY	Liguria	Yes
In selection	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 3 and 5	Not Specified	Contact note	34-36 K	ITALY	Puglia	Yes
In selection	late 20s	Female	Aeronautical/A erospace/Astro nautics Engineering	Three-year degree	between 3 and 5	Not Specified	Contact note	Not Given	ITALY	Piedmont	Yes
QM	early 30s	Male	Aeronautical/A erospace/Astro nautics Engineering	Five-year degree	between 3 and 5	Aeronautics	Candidate notification	Not Given	ITALY	Piedmont	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 1 and 3	Others	BM interview	Not Given	ITALY	Piedmont	Yes
In selection	late 20s	Female	Biomedical Engineering	Three-year degree	none	Not Specified	CV request	Not Given	ITALY	Piedmont	Yes
Hired	early 30s	Female	Biomedical Engineering	Five-year degree	between 0 and 1	Others	BM interview	Not Given	ITALY	Tuscany	Yes
QM	late 20s	Female	Automotive Engineering	Five-year degree	between 1 and 3	Others	BM interview	Not Given	ITALY	Piedmont	Yes
In selection	late 20s	Male	electronic Engineering	Five-year degree	between 1 and 3	Automotive	Contact note	Not Given	ITALY	Campania	Yes
In selection	late 20s	Male	Mechanical engineering	Five-year degree	none	Not Specified	Contact note	Not Given	ITALY	Liguria	Yes
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Hired	late 20s	Male	Aeronautical/A erospace/Astro nautics Engineering	Three-year degree	between 3 and 5	Not Specified	Candidate notification	Not Given	ITALY	Calabria	Yes
First contact	late 20s	Male	Mechanical engineering	Five-year degree	between 3 and 5	Others	CV request	44-46 K	ITALY	Piedmont	Yes
Economic proposal	late 20s	Male	Biomedical Engineering	Five-year degree	none	Others	Candidate notification	Not available	ITALY	Abruzzo	Yes
First contact	late 20s	Male	Biomedical Engineering	Five-year degree	none	Others	Contact note	Not Given	ITALY	Liguria	Yes
Hired	early 30s	Female	Management Engineering	Five-year degree	between 0 and 1	Consulting	Technical interview	28-30 K	ITALY	Emilia Romagna	Yes
In selection	early 30s	Male	Telecommunic ations Engineering	Five-year degree	between 5 and 7	Others	BM interview	34-36 K	ITALY	Calabria	Yes
Hired	more than 45 years	Male	Informatics	High school graduation	between 7 and 10	Aeronautics	Contact note	34-36 K	ITALY	Piedmont	Yes
Hired	late 30s	Male	Other scientific subjects	Five-year degree	between 3 and 5	Services and Information Systems	BM interview	26-28 K	ITALY	Lombardy	Yes
In selection	more than 45 years	Male	electronic Engineering	Five-year degree	more than 10	Telecom	BM interview	+ 50 K	ITALY	Lombardy	Yes
Hired	early 30s	Female	Mechanical engineering	Five-year degree	between 1 and 3	Life sciences	HR interview	Not Given	ITALY	Puglia	Yes
In selection	early 30s	Male	Automotive Engineering	Five-year degree	none	Others	BM interview	Not Given	ITALY	Puglia	Yes
QM	early 30s	Male	Mechanical engineering	Three-year degree	between 5 and 7	Automotive	CV request	Not Given	ITALY	Puglia	Yes
In selection	late 20s	Male	Mechanical engineering	Three-year degree	between 5 and 7	Others	HR interview	Not available	ITALY	Puglia	Yes
In selection	early 30s	Male	electronic Engineering	Five-year degree	between 5 and 7	Not Specified	CV request	32-34 K	ITALY	Puglia	Yes
In selection	early 30s	Male	industrial engineering	Three-year degree	between 1 and 3	Not Specified	BM interview	Not Given	ITALY	Puglia	Yes
In selection	early 30s	Female	electronic Engineering	Three-year degree	between 1 and 3	Not Specified	CV request	Not Given	ITALY	Puglia	Yes
Hired	early 30s	Female	computer engineering	Three-year degree	between 5 and 7	Railway	HR interview	Not Given	ITALY	Puglia	Yes

FeatureSelection

Features

Field Name	drop	sensitive	target
Candidate State	×	×	×
Age Range	×	×	×
Sex	×	~	×
Study area	×	×	×
Study Title	×	×	×
Years Experience	×	×	×
Sector	×	×	×
event_typeval	×	×	×
Expected Ral	×	×	'
Residence State	×	×	×
Residence Italian Region	×	×	×
European Residence	×	×	×

Stats

feature	missing_values	unique	top	freq	values	distribution	sensitive	target
" Candidate State"	0	7	Imported	6691	"Economic proposal", "First contact", "Hired", "Imported", "In selection", "QM", "Vivier"	5000 -	False	False
" Age Range"	0	7	late 20s	5666	"early 20s", "early 30s", "early 40s", "late 20s", "late 30s", "less than 20 years", "more than 45 years"	5000 -	False	False
" Sex"	0	2	Male	9414	"Female", "Male"	5000 -	False	False

feature	missing_values	unique	top	freq	values	distribution	sensitive	target
" Study area"	0	48	Mechanical engineering	2235	"Accounting", " Aeronautical/A erospace/Astro nautics Engineering", "Agriculture and veterinary", "Architecture", "Artistic", "Auto mation/Mechat ron	2000 -	False	False
" Study Title"	0	7	Five-year degree	6538	"Toctorate", "Five-year degree", "High school graduation", "Middle school diploma", "Professional qualification", "Three-year degree", "master'	5000 -	False	False

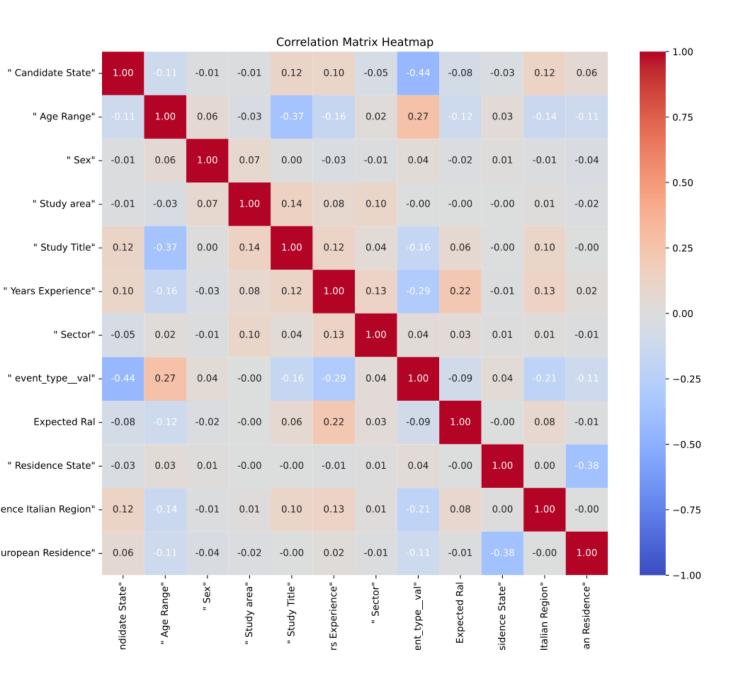
feature	missing_values	unique	top	freq	values	distribution	sensitive	target
" Years Experience"	0	7	none	8635	"between 0 and 1", "between 1 and 3", "between 3 and 5", "between 5 and 7", "between 7 and 10", "more than 10",	5000 -	False	False
" Sector"	0	15	Not Specified	7290	"Aeronautics", "Automotive", "Consulting", "Defence", "Energy", "Life sciences", "Machining - Heavy Industry", "Naval", "Not Specified", "Oi	5000 -	False	False

feature	missing_values	unique	top	freq	values	distribution	sensitive	target
" event_type val"	0	13	CV request	6988	"BM interview", "CV request", "Candidate notification", "Commercial note", "Contact note", "Economic proposal", "HR interview", "Inadequate CV	5000 -	False	False
Expected Ral	0	19	Not Given	10791	"+ 50 K", "- 20 K", "20-22 K", "22-24 K", "24-26 K", "26-28 K", "28-30 K", "30-32 K", "32-34 K", "34-36 K", "36-38 K", "38-40 K",	10000 -	False	False

feature	missing_values	unique	top	freq	values	distribution	sensitive	target
" Residence State"	0	63	ITALY	11960	"ALBANIA", "ALGERIA", "AUSTRIA", "BELARUS", "BELGIUM", "BRAZIL", "BULGARIA", "CHILE", "CHINA PEOPLE"S REPUBLIC", "COLOMBIA", "CROATIA", "	10000 -	False	False
" Residence Italian Region"	0	22	Piedmont	3879	"Abruzzo", "Aosta Valley", "Basilicata", "Calabria", "Campania", "Emilia Romagna", "Friuli Venezia Giulia", "Lazio", "Liguria", "Lombardy",	2500 -	False	False
" European Residence"	0	2	Yes	12087	"'No", "Yes"'	10000 -	False	False

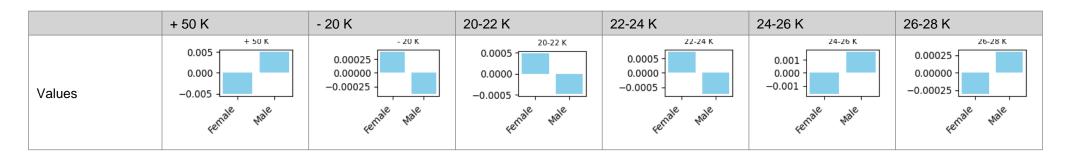
Proxies

CorrelationMatrix

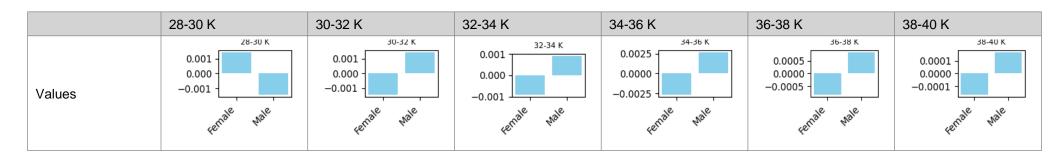


Detection

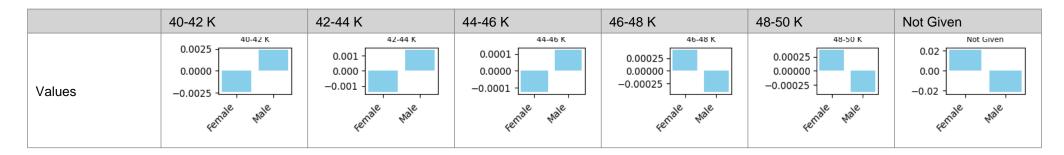
StatisticalParityDifference



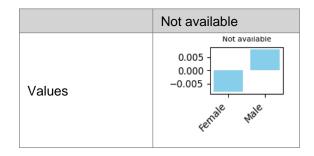
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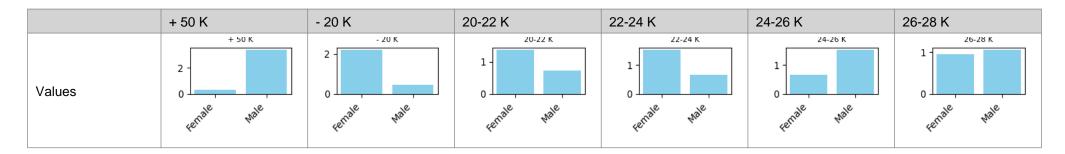
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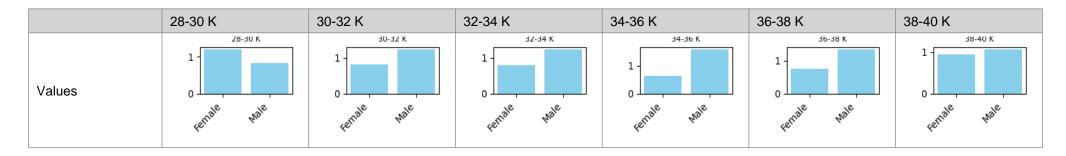
StatisticalParityDifference



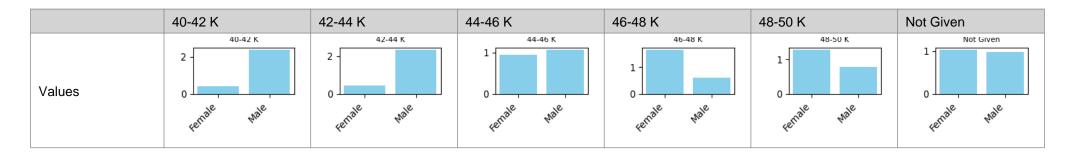
DisparateImpact



DisparateImpact



DisparateImpact



DisparateImpact



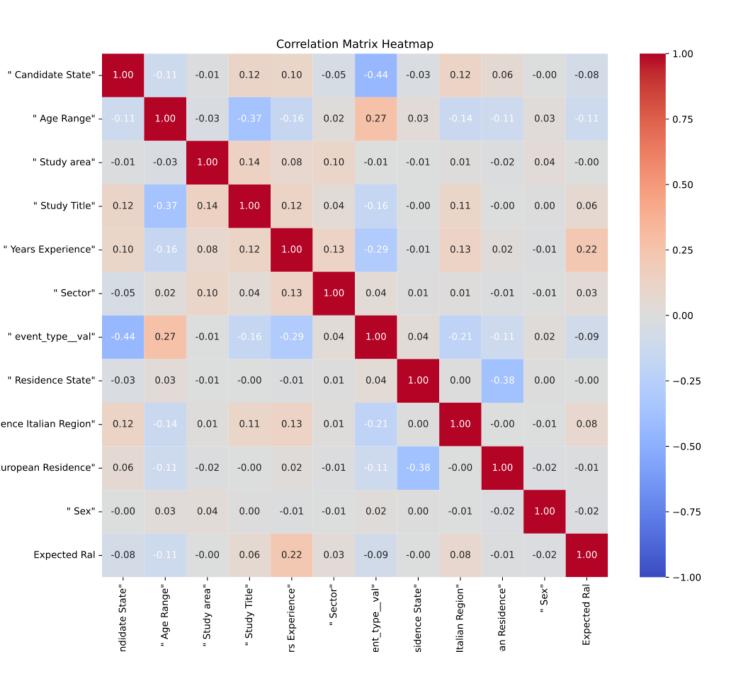
DataMitigation

Preprocessing

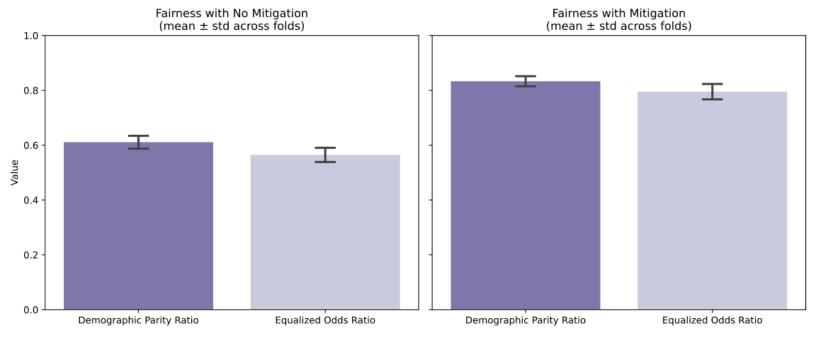
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CorrelationRemover	70.00%

DataMitigationSummary

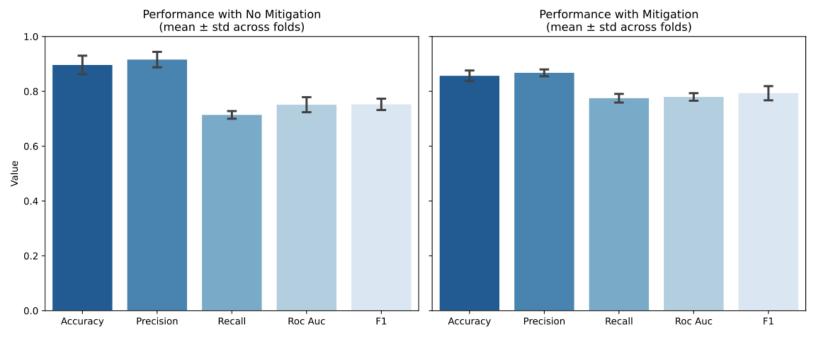
CorrelationMatrix



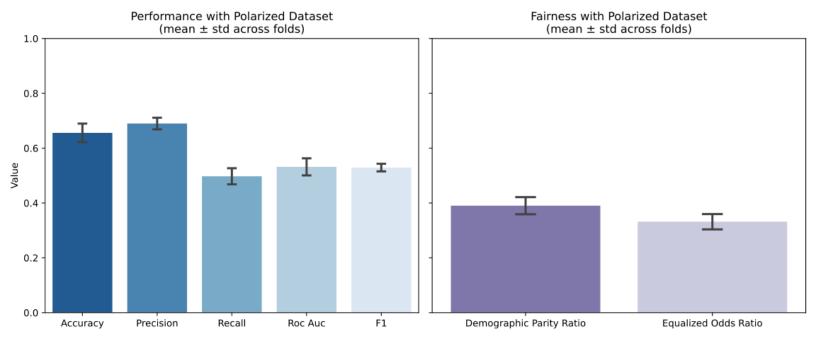
FairnessPlot



PerformancePlot



PolarizationPlot



PreprocessingPlot

