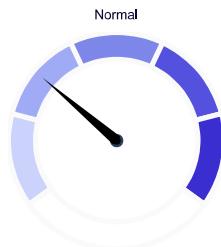


gretel Synthetic Data Quality Report

[Gretel Sign In → \(https://console.gretel.ai/login\)](https://console.gretel.ai/login)
Model

data-amplification-model

Model UID 64565bd5bcb178219f4d3936

Synthetic Data Quality Score [?](#)Privacy Protection Level [?](#)**Project**

Generated 05/06/2023, 13:53

The Synthetic Data Quality Score is an estimate of how well the generated synthetic data maintains the same statistical properties as the original dataset. In this sense, the Synthetic Data Quality Score can be viewed as a utility score or a confidence score as to whether scientific conclusions drawn from the synthetic dataset would be the same if one were to have used the original dataset instead. If you do not require statistical symmetry, as might be the case in a testing or demo environment, a lower score may be just as acceptable.

The Synthetic Data Quality Score is computed by taking a weighted combination of the individual quality metrics: Field Distribution Stability, Field Correlation Stability and Deep Structure Stability.

If your Synthetic Data Quality Score isn't as high as you'd like it to be, read here (<https://docs.gretel.ai/reference/synthetics/tips-improve-synthetic-data-accuracy>) for a multitude of ideas for improving your model.

Synthetic Data Use Cases	Excellent	Good	Moderate	Poor	Very Poor
Significant tuning required to improve model	○	○	○	○	⚠️
Improve your model using our tips and advice	○	✓	✓	✓	○
Demo environments or mock data	✓	✓	✓	○	○
Pre-production testing environments	✓	✓	✓	○	○
Balance or augment machine learning data sources	✓	✓	○	○	○
Machine learning or statistical analysis	✓	✓	○	○	○

Data Summary Statistics

Excellent

91

Field Correlation Stability

Excellent

87

Deep Structure Stability

Excellent

83

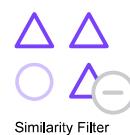
Field Distribution Stability

	Training Data	Synthetic Data
Row Count	1470	1470
Column Count	32	32
Training Lines Duplicated	-	0

What do these values mean?

Privacy Protection Summary

Default Privacy Protections

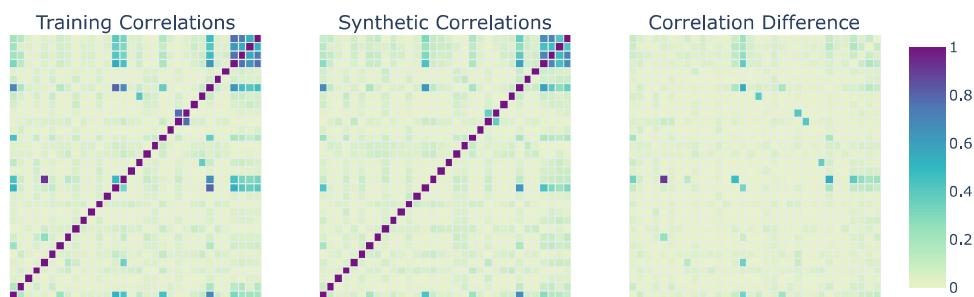
Outlier Filter
DisabledSimilarity Filter
DisabledOverfitting Prevention
Disabled

Advanced Protections

Differential Privacy
Disabled

Training field overview

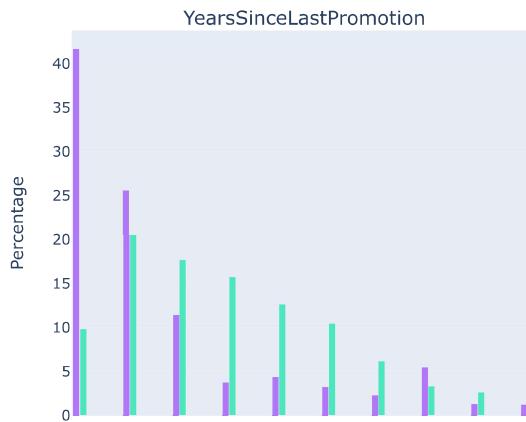
Field	Unique	Missing	Ave. Length	Type	Distribution Stability
YearsSinceLastPromotion	16	0	1.05	Numeric	Moderate
DistanceFromHome	29	0	1.36	Numeric	Good
YearsWithCurrManager	18	0	1.07	Numeric	Good
YearsInCurrentRole	19	0	1.07	Numeric	Good
TrainingTimesLastYear	7	0	1.00	Categorical	Good
NumCompaniesWorked	10	0	1.00	Categorical	Good
JobSatisfaction	4	0	1.00	Categorical	Good
EnvironmentSatisfaction	4	0	1.00	Categorical	Good
YearsAtCompany	37	0	1.25	Numeric	Good
PercentSalaryHike	15	0	2.00	Numeric	Good
TotalWorkingYears	40	0	1.51	Numeric	Good
RelationshipSatisfaction	4	0	1.00	Categorical	Excellent
JobLevel	5	0	1.00	Categorical	Excellent
StockOptionLevel	4	0	1.00	Categorical	Excellent
Attrition	2	0	2.16	Binary	Excellent
JobInvolvement	4	0	1.00	Categorical	Excellent
Education	5	0	1.00	Categorical	Excellent
WorkLifeBalance	4	0	1.00	Categorical	Excellent
Age	43	0	2.00	Numeric	Excellent
PerformanceRating	2	0	1.00	Binary	Excellent
BusinessTravel	3	0	13.45	Categorical	Excellent
Department	3	0	16.54	Categorical	Excellent
Overtime	2	0	2.28	Binary	Excellent
DailyRate	886	0	3.36	Numeric	Excellent
HourlyRate	71	0	2.01	Numeric	Excellent
EmployeeNumber	1470	0	3.46	Numeric	Excellent
MonthlyRate	1427	0	4.67	Numeric	Excellent
MaritalStatus	3	0	6.90	Categorical	Excellent
JobRole	9	0	18.07	Categorical	Excellent
EducationField	6	0	10.53	Categorical	Excellent
MonthlyIncome	1470	0	5.00	Numeric	Excellent
Gender	2	0	4.80	Binary	Excellent

Training and Synthetic Data Correlation

Principal Component Analysis

Field Distribution Comparisons

0 0



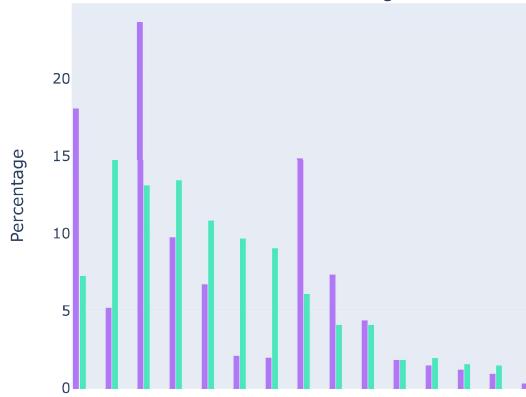
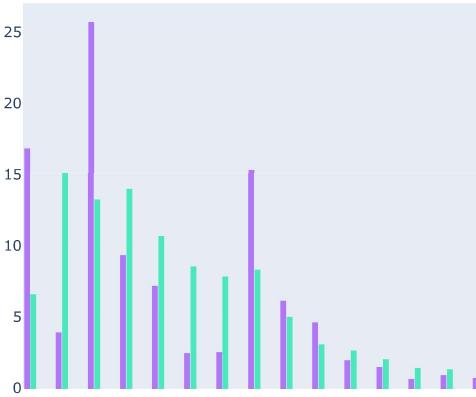
Training Data Synthetic Data

DistanceFromHome

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YearsWithCurrManager

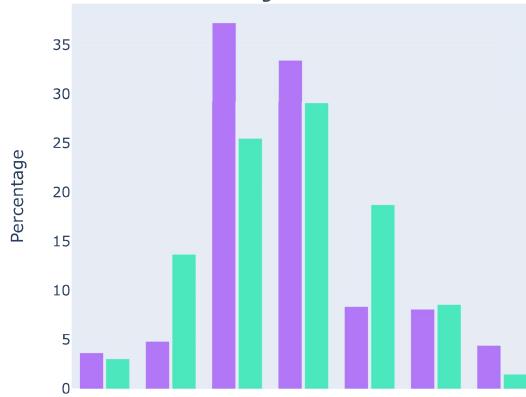
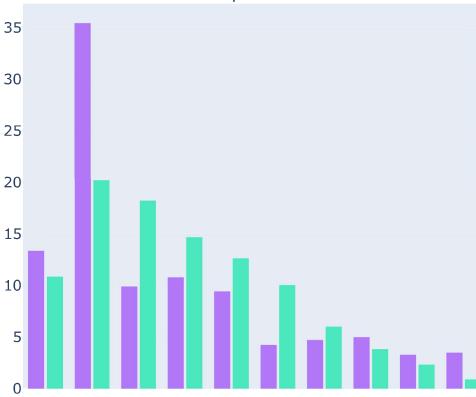
Percentage

**YearsInCurrentRole**

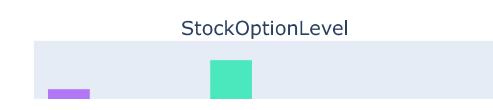
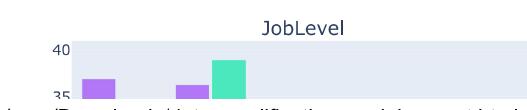
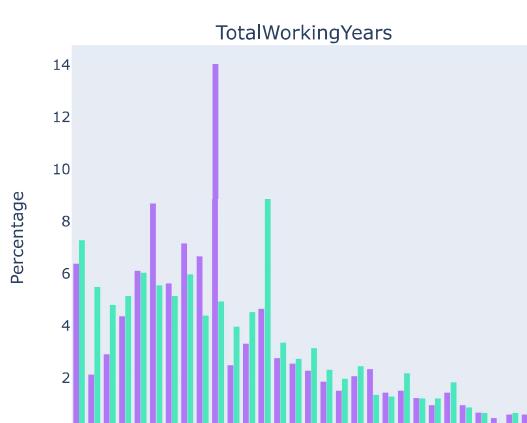
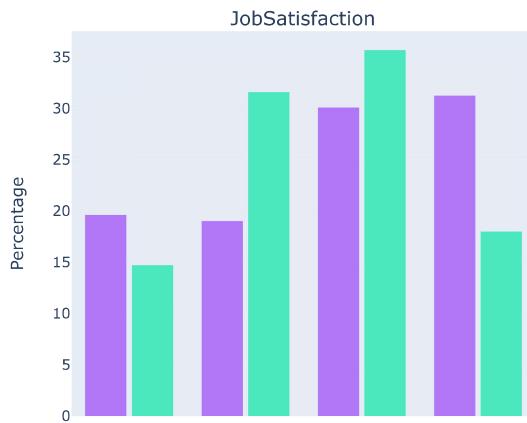
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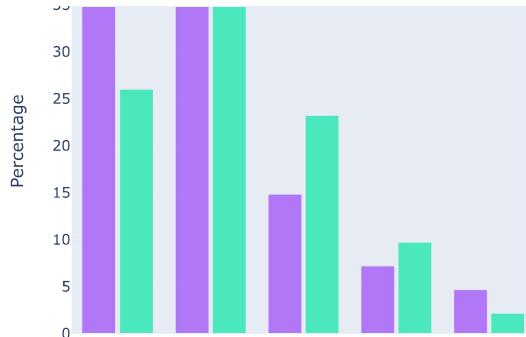
TrainingTimesLastYear

Percentage

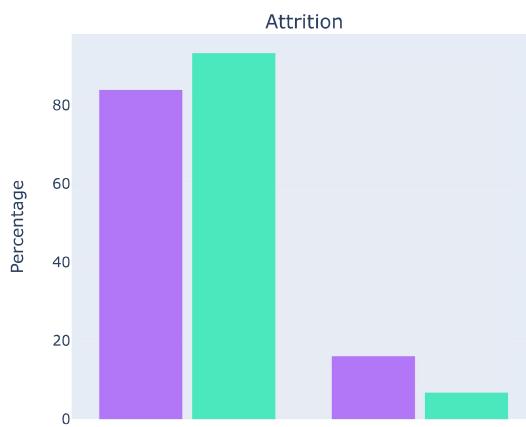
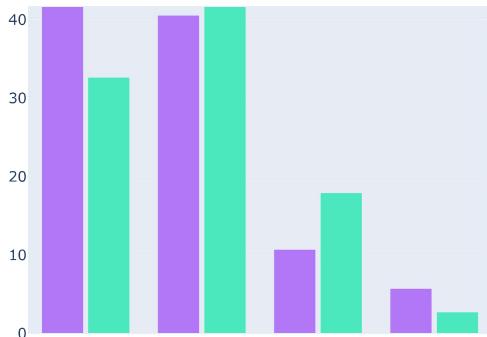
**NumCompaniesWorked**

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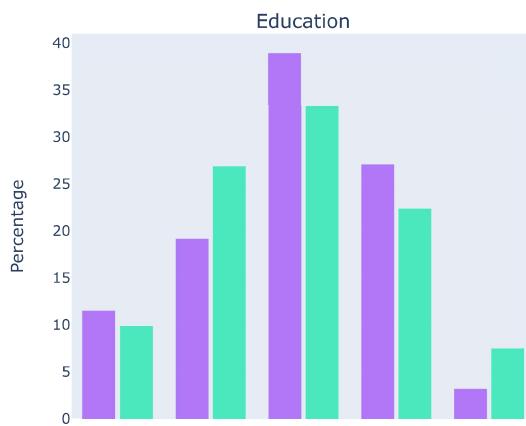
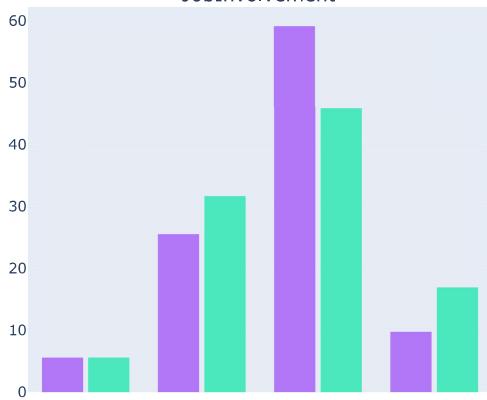


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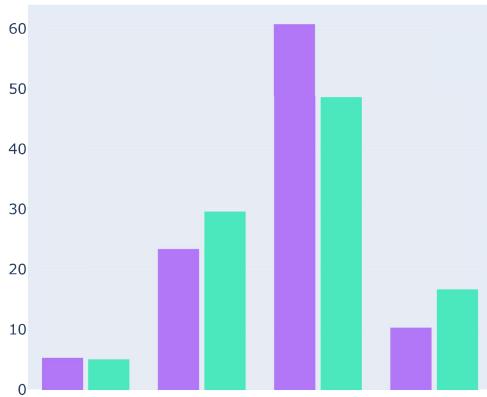
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JobInvolvement

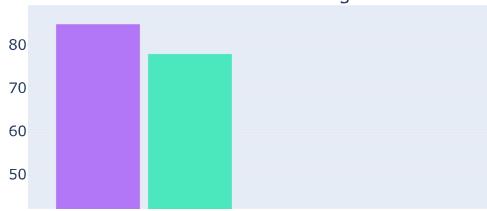


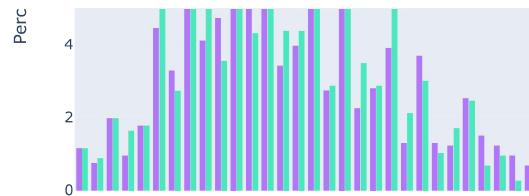
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WorkLifeBalance

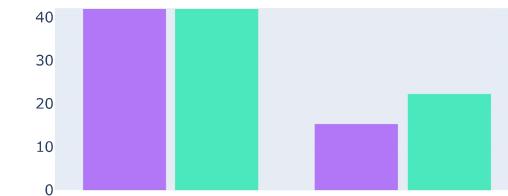


PerformanceRating



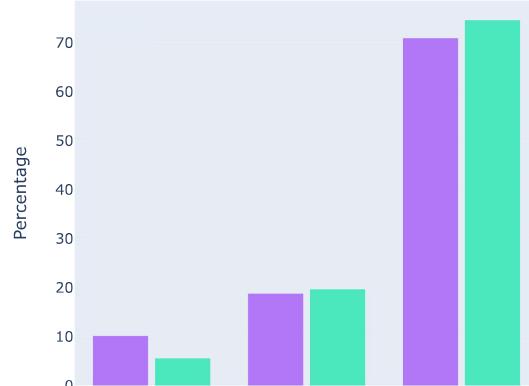


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BusinessTravel

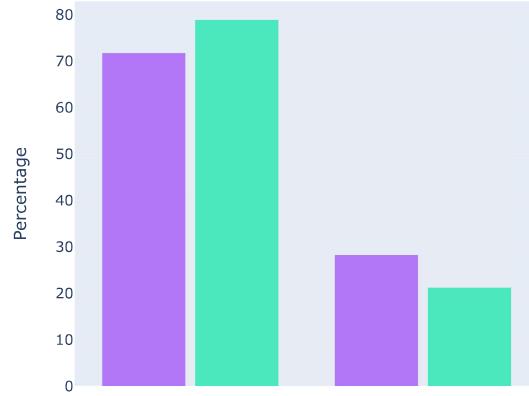


Department

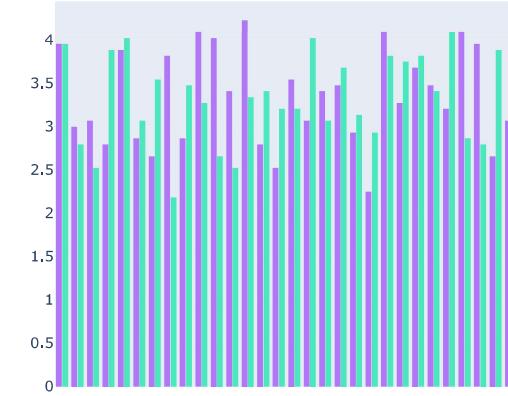


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OverTime

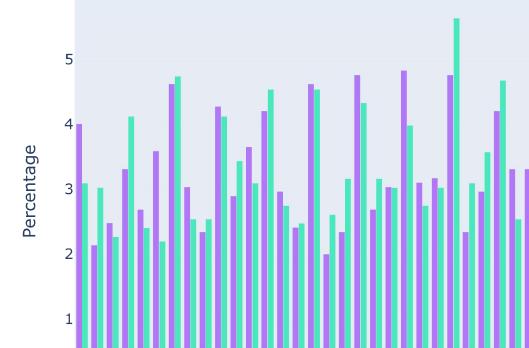


DailyRate

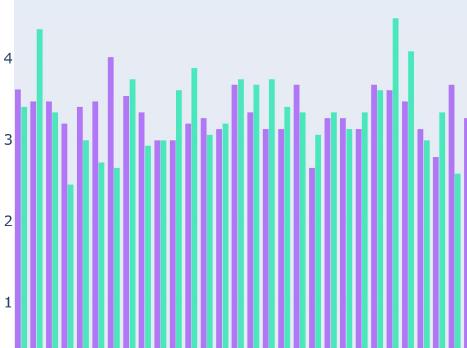


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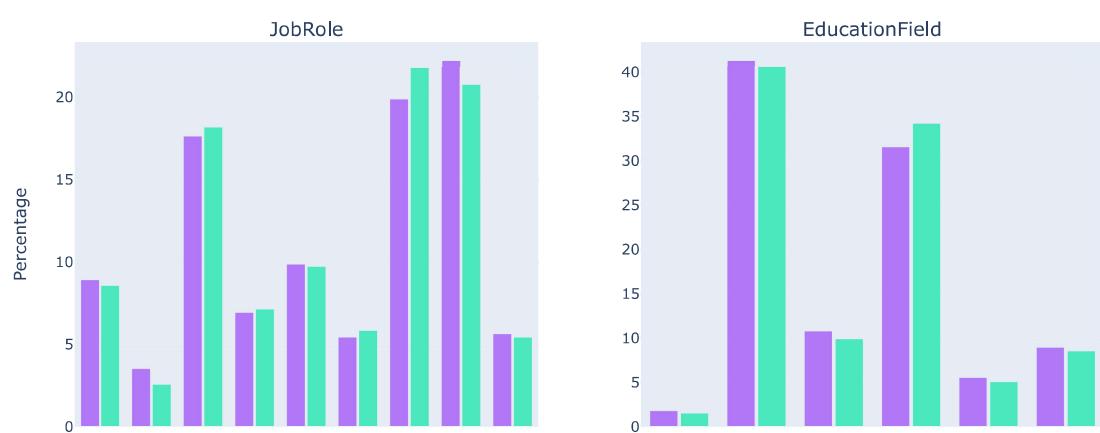
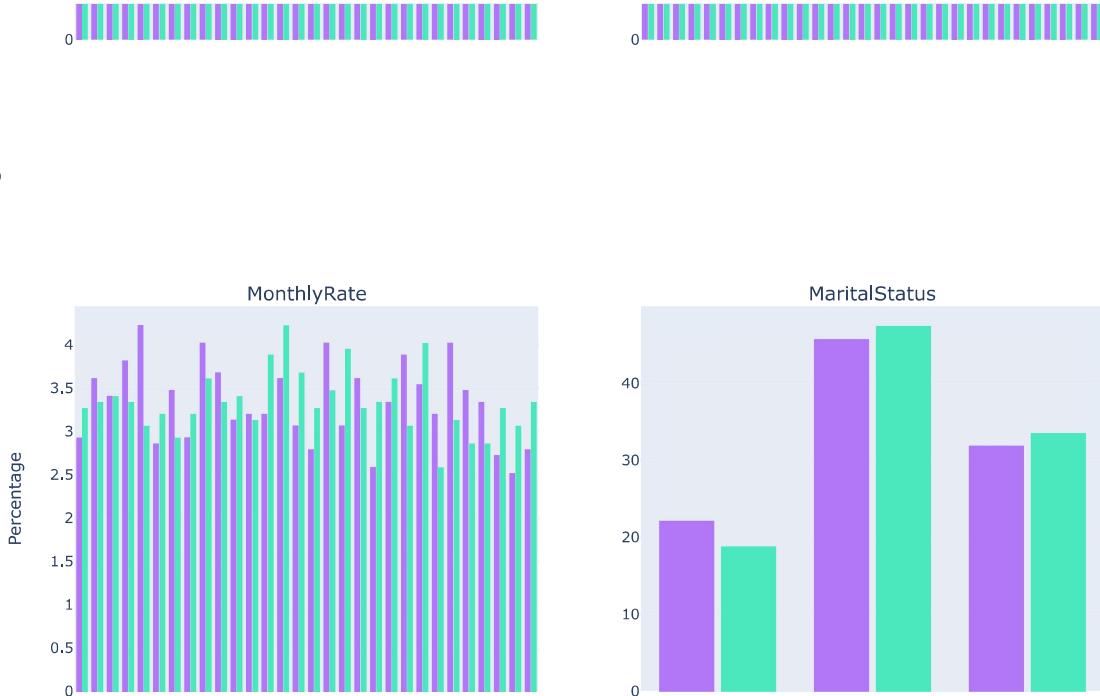
HourlyRate

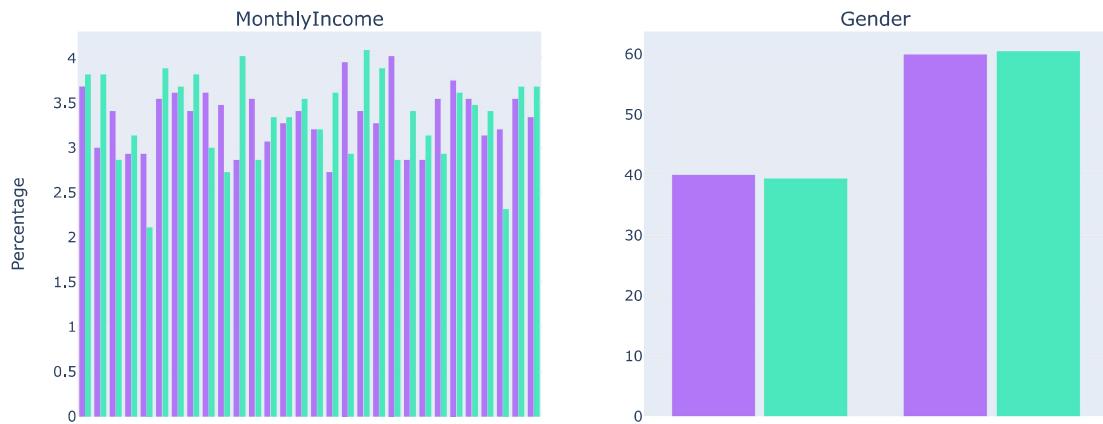


EmployeeNumber



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