

# SageMaker Model Quality Report

This report contains model insights and model quality information for candidate **automl-dm-1682928361TBvyuEmnS8Dv-003-ab98e1ee**. The candidate was generated by the AutoML job **automl-dm-1682928361**.

The **automl-dm-1682928361TBvyuEmnS8Dv-003-ab98e1ee** candidate is a trained **Regression** model whose objective is to **Minimize** the "**MSE**" quality metric.

The mean squared error (MSE) is the average of the squared differences between the predicted and actual values. It is used for regression. MSE values are always positive: The better a model is at predicting the actual values, the smaller the MSE value is. When the data contains outliers, they tend to dominate the MSE, which might cause subpar prediction performance.

## Contents

- 1. [Autopilot job details](#)
- 2. [Model quality report](#)
  - A. [Metrics table](#)

## Autopilot job details

	Title	Value
Autopilot candidate name	automl-dm-1682928361TBvyuEmnS8Dv-003-ab98e1ee	
Autopilot job name	automl-dm-1682928361	
Problem type	Regression	
Objective metric	MSE	
Optimization direction	Minimize	

## Model quality report

Model quality information is generated by the prebuilt SageMaker Model Monitor container. This report is for a **Regression** problem. **10496** rows were included in the evaluation dataset. The evaluation time occurred at **2023-05-01T08:31:22.403Z**.

## Metrics table

Metric Name	Value	Standard Deviation
mae	280.930572	3.899752
mse	1997340.928113	83160.348838
rmse	1413.273126	28.447924
r2	-0.010219	0.000242

**Note** The values of the performance metrics in this table may differ from the values reported by Autopilot. The differences tend to appear when training on smaller datasets. The values for the metrics in the table use all the training data once to estimate the performance of a model. Autopilot scores are calculated using k-fold cross-validation resampling method that train a machine learning algorithm on different subsets of the dataset. A score is then calculated for overall performance by averaging the resulting performance metrics for each trial.