Analysis Report

Global dataset report

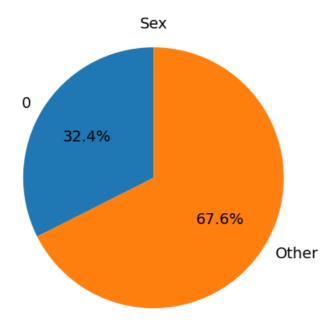
We report the following SageMaker analysis.

Pre-training Bias Metrics

We computed the bias metrics for the label Target using label value(s)/threshold 1 for the below facets.

• Sex

The groups are represented in the dataset with the following proportions.



Value(s)/Threshold: 0

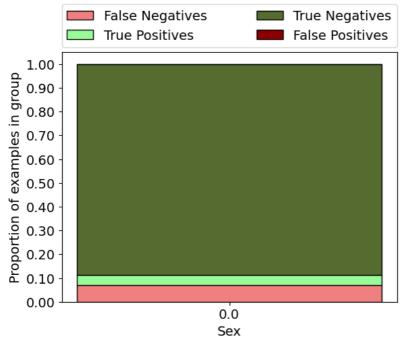
name	description	value
CDDL	Conditional Demographic Disparity in Labels (CDDL)	0.214916
CI	Class Imbalance (CI)	0.351369
DPL	Difference in Positive Proportions in Labels (DPL)	0.200159
JS	Jensen-Shannon Divergence (JS)	0.030756
KL	Kullback-Liebler Divergence (KL)	0.143069
KS	Kolmogorov-Smirnov Distance (KS)	0.200159
LP	L-p Norm (LP)	0.283067
TVD	Total Variation Distance (TVD)	0.200159

Post-training Bias Metrics

We computed the bias metrics for the label Target using label value(s)/threshold 1 for the below facets.

Sex

The labels and predictions of the group have the following proportions.



Positive labels = TP + FN --- Used in the following metrics: DPL, JS, KL, KS, LP, TVD Negative labels = TN + FP Positive predictions = TP + FP --- Used in the following metrics: DI Negative predictions = TN + FN Accuracy = TP + TN --- Used in the following metrics: AD

Accuracy = TP + TN --- Used in the following metrics: AD Recall = TP / (TP + FN) --- Used in the following metrics: RD Precision = TP / (TP + FP) --- Used in the following metrics: DAR

Value(s)/Threshold: 0

name	description	value
AD	Accuracy Difference (AD)	-0.114157
CDDPL	Conditional Demographic Disparity in Predicted \dots	0.197162
DAR	Difference in Acceptance Rates (DAR)	-0.007405
DCA	Difference in Conditional Acceptance (DCA)	-0.227503
DCR	Difference in Conditional Rejection (DCR)	0.132825
DI	Disparate Impact (DI)	0.329391
DPPL	Difference in Positive Proportions in Predicted	0.0922
DRR	Difference in Rejection Rates (DRR)	0.136533
FT	Flip Test (FT)	-0.0046
GE	Generalized Entropy (GE)	0.086527
RD	Recall Difference (RD)	0.035565
SD	Specificity Difference (SD)	0.004853
TE	Treatment Equality (TE)	24.114286

Analysis Configuration Parameters

```
{
    "dataset_type": "text/csv",
    "headers": [
        "Target",
        "Age",
        "Workclass",
        "fnlwgt",
        "Education",
        "Education-Num",
        "Marital Status",
```

```
"Occupation",
     "Relationship",
     "Ethnic group",
     "Sex",
    "Capital Gain",
     "Capital Loss",
     "Hours per week",
     "Country"
  ],
  "label": "Target",
  "label_values_or_threshold": [
    1
  ],
  "facet": [
     {
       "name_or_index": "Sex",
       "value_or_threshold": [
         0
       ]
     }
  "group_variable": "Age",
  "methods": {
     "report": {
       "name": "report",
       "title": "Analysis Report"
     },
     "pre_training_bias": {
       "methods": "all"
     },
     "post_training_bias": {
       "methods": "all"
     }
  },
  "predictor": {
    "model_name": "DEMO-clarify-model-01-12-2022-15-58-43",
     "instance_type": "ml.m5.xlarge",
     "initial_instance_count": 1,
    "accept_type": "text/csv",
    "content_type": "text/csv"
  },
  "probability_threshold": 0.8
}
```