## **Analysis Report**

We report the following SageMaker analysis.

## **Post-training Bias Metrics**

We computed the bias metrics for the label star\_rating using label value(s)/threshold 5,4.

## product\_category

 $Value(s)/Threshold: Digital\_Software$ 

name	description	value
AD	Accuracy Difference (AD)	0.0233333
CDDPL	Conditional Demographic Disparity in Predicted Labels (CDDPL)	0
DAR	Difference in Acceptance Rates (DAR)	0.231262
DCA	Difference in Conditional Acceptance (DCA)	0.143409
DCR	Difference in Conditional Rejection (DCR)	-0.0158425
DI	Disparate Impact (DI)	0.655556
DPPL	Difference in Positive Proportions in Predicted Labels (DPPL)	0.206667
DRR	Difference in Rejection Rates (DRR)	0.0991758
RD	Recall Difference (RD)	0.161902
TE	Treatment Equality (TE)	-0.0892857

Value(s)/Threshold: Digital\_Video\_Games

value	description	name
0.183333	Accuracy Difference (AD)	AD
0	Conditional Demographic Disparity in Predicted Labels (CDDPL)	CDDPL
0.27327	Difference in Acceptance Rates (DAR)	DAR
0.20566	Difference in Conditional Acceptance (DCA)	DCA
0.236474	Difference in Conditional Rejection (DCR)	DCR
1.00629	Disparate Impact (DI)	DI
-0.00333333	Difference in Positive Proportions in Predicted Labels (DPPL)	DPPL
-0.0800405	Difference in Rejection Rates (DRR)	DRR
0.155754	Recall Difference (RD)	RD
-0.204545	Treatment Equality (TE)	TE

Value(s)/Threshold: Gift Card

name	description	value
AD	Accuracy Difference (AD)	-0.206667
CDDPL	Conditional Demographic Disparity in Predicted Labels (CDDPL)	0
DAR	Difference in Acceptance Rates (DAR)	-0.426763
DCA	Difference in Conditional Acceptance (DCA)	-0.29777
DCR	Difference in Conditional Rejection (DCR)	-0.268447
DI	Disparate Impact (DI)	1.43885
DPPL	Difference in Positive Proportions in Predicted Labels (DPPL)	-0.203333
DRR	Difference in Rejection Rates (DRR)	-0.0363975
RD	Recall Difference (RD)	-0.234923
TE	Treatment Equality (TE)	0.609649