

Analysis Report

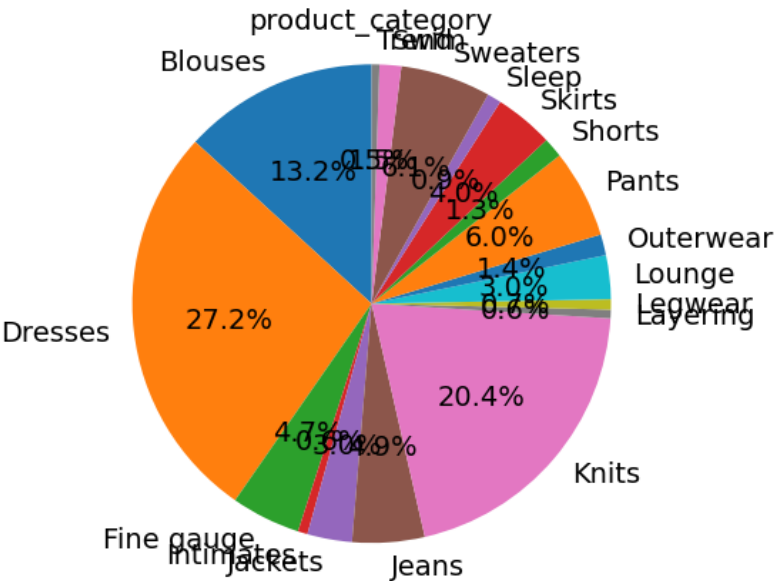
We report the following SageMaker analysis.

Pre-training Bias Metrics

We computed the bias metrics for the label `sentiment` using label value(s)/threshold `1`.

- `product_category`

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



Value(s)/Threshold: Blouses

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.736321 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.016356 |
| JS | Jensen-Shannon Divergence (JS) | 0.000186 |
| KL | Kullback-Liebler Divergence (KL) | 0.000737 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.016356 |
| LP | L-p Norm (LP) | 0.023131 |
| TVD | Total Variation Distance (TVD) | 0.016356 |

Value(s)/Threshold: Dresses

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.45682 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.022482 |
| JS | Jensen-Shannon Divergence (JS) | 0.000352 |
| KL | Kullback-Liebler Divergence (KL) | 0.001392 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.022482 |
| LP | L-p Norm (LP) | 0.031795 |
| TVD | Total Variation Distance (TVD) | 0.022482 |

Value(s)/Threshold: Pants

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.880668 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.026661 |
| JS | Jensen-Shannon Divergence (JS) | 0.000522 |
| KL | Kullback-Liebler Divergence (KL) | 0.002119 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.026661 |
| LP | L-p Norm (LP) | 0.037704 |
| TVD | Total Variation Distance (TVD) | 0.026661 |

Value(s)/Threshold: Knits

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.59109 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.011213 |
| JS | Jensen-Shannon Divergence (JS) | 0.000088 |
| KL | Kullback-Liebler Divergence (KL) | 0.00035 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.011213 |
| LP | L-p Norm (LP) | 0.015857 |
| TVD | Total Variation Distance (TVD) | 0.011213 |

Value(s)/Threshold: Intimates

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.987006 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.025599 |
| JS | Jensen-Shannon Divergence (JS) | 0.000483 |
| KL | Kullback-Liebler Divergence (KL) | 0.001959 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.025599 |
| LP | L-p Norm (LP) | 0.036203 |
| TVD | Total Variation Distance (TVD) | 0.025599 |

Value(s)/Threshold: Outerwear

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.971802 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.026121 |
| JS | Jensen-Shannon Divergence (JS) | 0.000503 |
| KL | Kullback-Liebler Divergence (KL) | 0.00204 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.026121 |
| LP | L-p Norm (LP) | 0.036941 |
| TVD | Total Variation Distance (TVD) | 0.026121 |

Value(s)/Threshold: Lounge

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.940864 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.045509 |
| JS | Jensen-Shannon Divergence (JS) | 0.001573 |
| KL | Kullback-Liebler Divergence (KL) | 0.006474 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.045509 |
| LP | L-p Norm (LP) | 0.06436 |
| TVD | Total Variation Distance (TVD) | 0.045509 |

Value(s)/Threshold: Sweaters

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.878016 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.021044 |
| JS | Jensen-Shannon Divergence (JS) | 0.000305 |
| KL | Kullback-Liebler Divergence (KL) | 0.001207 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.021044 |
| LP | L-p Norm (LP) | 0.029761 |
| TVD | Total Variation Distance (TVD) | 0.021044 |

Value(s)/Threshold: Skirts

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.92018 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.021053 |
| JS | Jensen-Shannon Divergence (JS) | 0.000323 |
| KL | Kullback-Liebler Divergence (KL) | 0.001308 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.021053 |
| LP | L-p Norm (LP) | 0.029773 |
| TVD | Total Variation Distance (TVD) | 0.021053 |

Value(s)/Threshold: Fine gauge

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.906391 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.020859 |
| JS | Jensen-Shannon Divergence (JS) | 0.000317 |
| KL | Kullback-Liebler Divergence (KL) | 0.001283 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.020859 |
| LP | L-p Norm (LP) | 0.0295 |
| TVD | Total Variation Distance (TVD) | 0.020859 |

Value(s)/Threshold: Sleep

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.981084 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.047723 |
| JS | Jensen-Shannon Divergence (JS) | 0.001743 |
| KL | Kullback-Liebler Divergence (KL) | 0.007185 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.047723 |
| LP | L-p Norm (LP) | 0.067491 |
| TVD | Total Variation Distance (TVD) | 0.047723 |

Value(s)/Threshold: Jackets

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.939627 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.035868 |
| JS | Jensen-Shannon Divergence (JS) | 0.000961 |
| KL | Kullback-Liebler Divergence (KL) | 0.003928 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.035868 |
| LP | L-p Norm (LP) | 0.050725 |
| TVD | Total Variation Distance (TVD) | 0.035868 |

Value(s)/Threshold: Swim

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.970653 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.01162 |
| JS | Jensen-Shannon Divergence (JS) | 0.000094 |
| KL | Kullback-Liebler Divergence (KL) | 0.000373 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.01162 |
| LP | L-p Norm (LP) | 0.016433 |
| TVD | Total Variation Distance (TVD) | 0.01162 |

Value(s)/Threshold: Trend

| name | description | value |
|------|--|----------|
| CI | Class Imbalance (CI) | 0.98957 |
| DPL | Difference in Positive Proportions in Labels (DPL) | 0.110042 |
| JS | Jensen-Shannon Divergence (JS) | 0.00748 |
| KL | Kullback-Liebler Divergence (KL) | 0.028876 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.110042 |
| LP | L-p Norm (LP) | 0.155623 |
| TVD | Total Variation Distance (TVD) | 0.110042 |

Value(s)/Threshold: Jeans

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.902413 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.055597 |
| JS | Jensen-Shannon Divergence (JS) | 0.002382 |
| KL | Kullback-Liebler Divergence (KL) | 0.009875 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.055597 |
| LP | L-p Norm (LP) | 0.078626 |
| TVD | Total Variation Distance (TVD) | 0.055597 |

Value(s)/Threshold: Legwear

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.986034 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.027173 |
| JS | Jensen-Shannon Divergence (JS) | 0.000545 |
| KL | Kullback-Liebler Divergence (KL) | 0.002215 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.027173 |
| LP | L-p Norm (LP) | 0.038428 |
| TVD | Total Variation Distance (TVD) | 0.027173 |

Value(s)/Threshold: Shorts

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.973128 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.019247 |
| JS | Jensen-Shannon Divergence (JS) | 0.00027 |
| KL | Kullback-Liebler Divergence (KL) | 0.001091 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.019247 |
| LP | L-p Norm (LP) | 0.027219 |
| TVD | Total Variation Distance (TVD) | 0.019247 |

Value(s)/Threshold: Layering

| name | description | value |
|------|--|-----------|
| CI | Class Imbalance (CI) | 0.988332 |
| DPL | Difference in Positive Proportions in Labels (DPL) | -0.086077 |
| JS | Jensen-Shannon Divergence (JS) | 0.006138 |
| KL | Kullback-Liebler Divergence (KL) | 0.026226 |
| KS | Kolmogorov-Smirnov Distance (KS) | 0.086077 |
| LP | L-p Norm (LP) | 0.121732 |
| TVD | Total Variation Distance (TVD) | 0.086077 |