

Univariate Analysis Report

Cancer Model

2024-01-31

Univariate Report

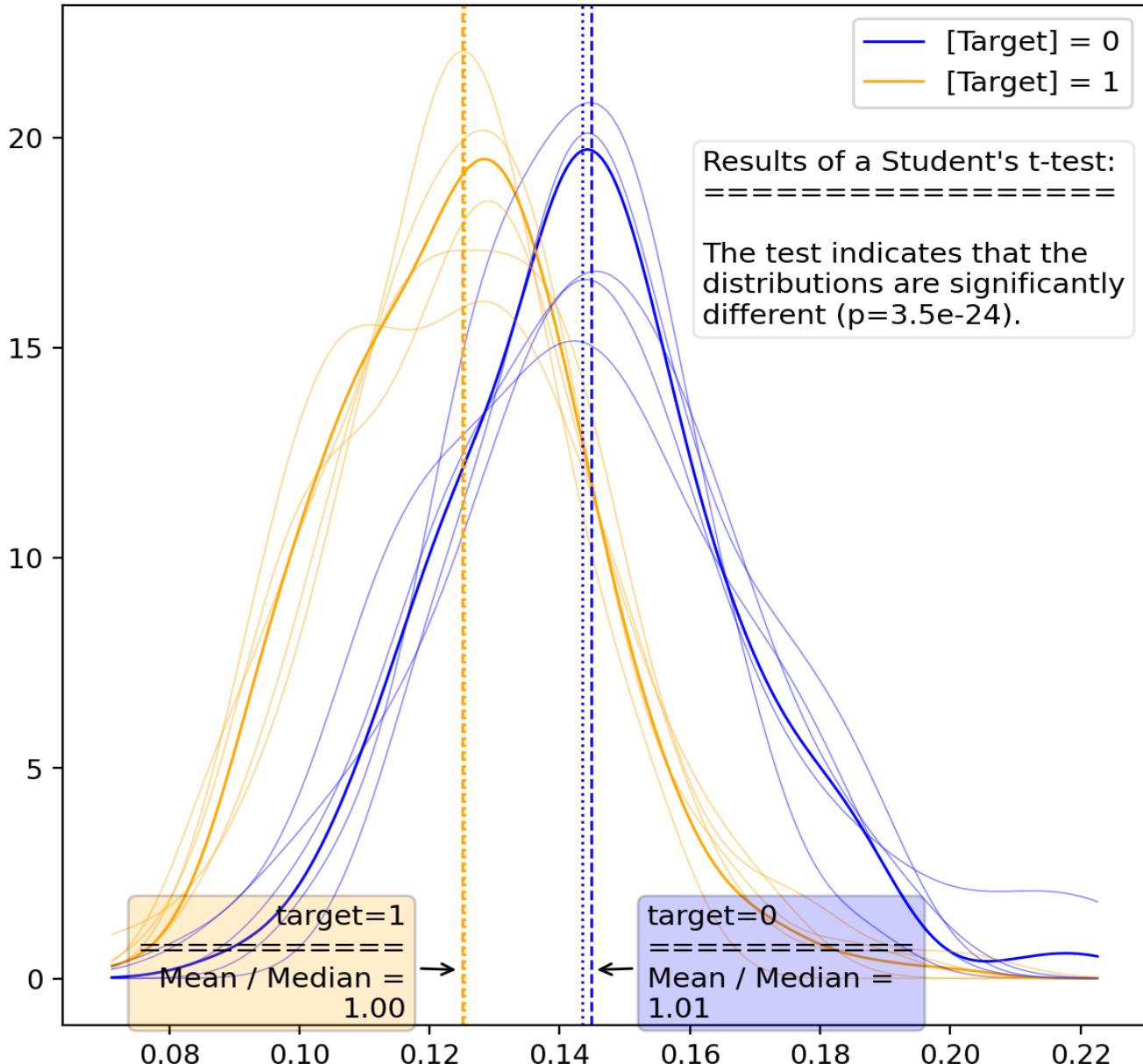
Worst Smoothness - Results

	Fold-1	Fold-2	Fold-3	Fold-4	Fold-5	Agg. Mean	Agg. SD
Fitted Coef.	2.73	2.52	2.77	2.68	2.74	2.69	0.10
Fitted p-Value	1.4e-04	3.2e-04	7.5e-05	1.8e-04	1.5e-04	2.4e-05	9.0e-05
Fitted Std. Err.	0.714	0.700	0.700	0.717	0.723	0.636	0.010
Conf. Int. Lower	1.33	1.15	1.40	1.28	1.32	1.44	0.09
Conf. Int. Upper	4.13	3.89	4.14	4.09	4.15	3.93	0.11
Train Accuracy	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Accuracy	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Val AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Train F1	77.3%	76.7%	77.3%	76.9%	77.2%	77.1%	0.3%
Test F1	76.3%	78.7%	75.9%	77.8%	76.8%	77.1%	1.1%
Train Precision	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Precision	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Val Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Train MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Val MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Train Log-Loss	13.33	13.60	13.32	13.52	13.39	13.43	0.13
Val Log-Loss	13.82	12.68	13.98	13.11	13.59	13.43	0.53

Univariate Report

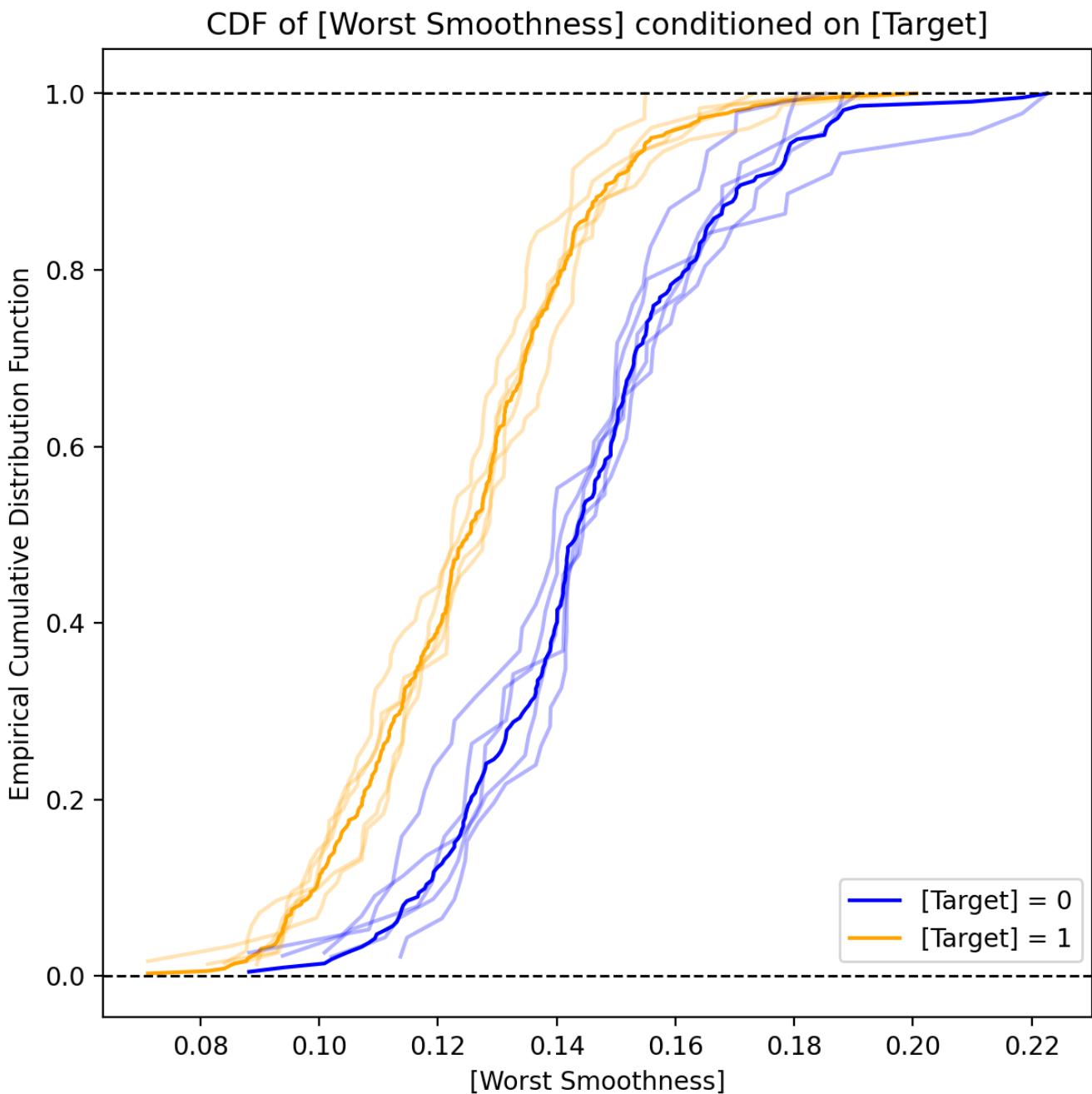
Worst Smoothness - Kernel Density Plot

Density Plot of [[Worst Smoothness]] by [[Target]]
Distributions by level are significantly different at the 95% level.



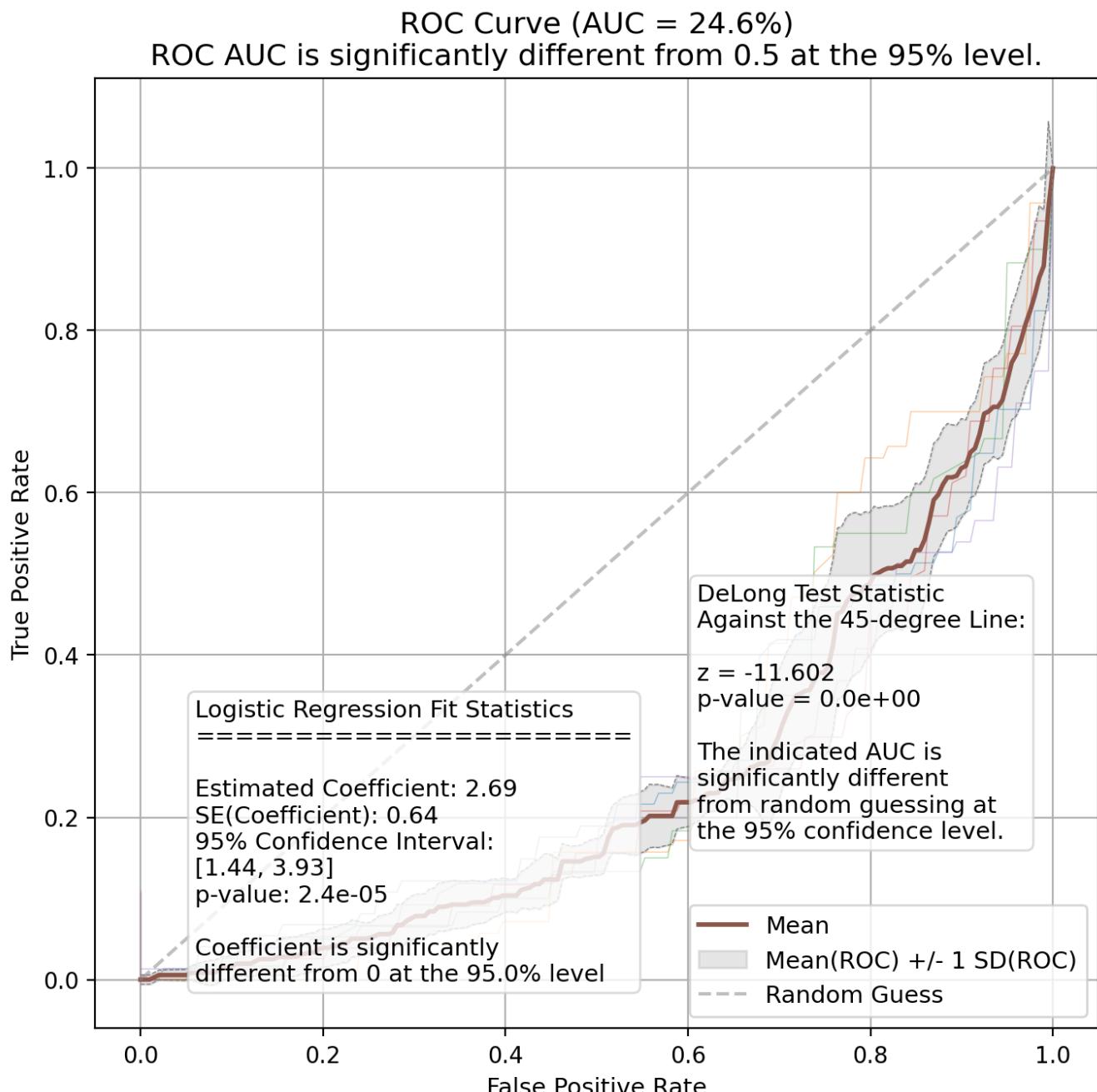
Univariate Report

Worst Smoothness - Empirical CDF Plot



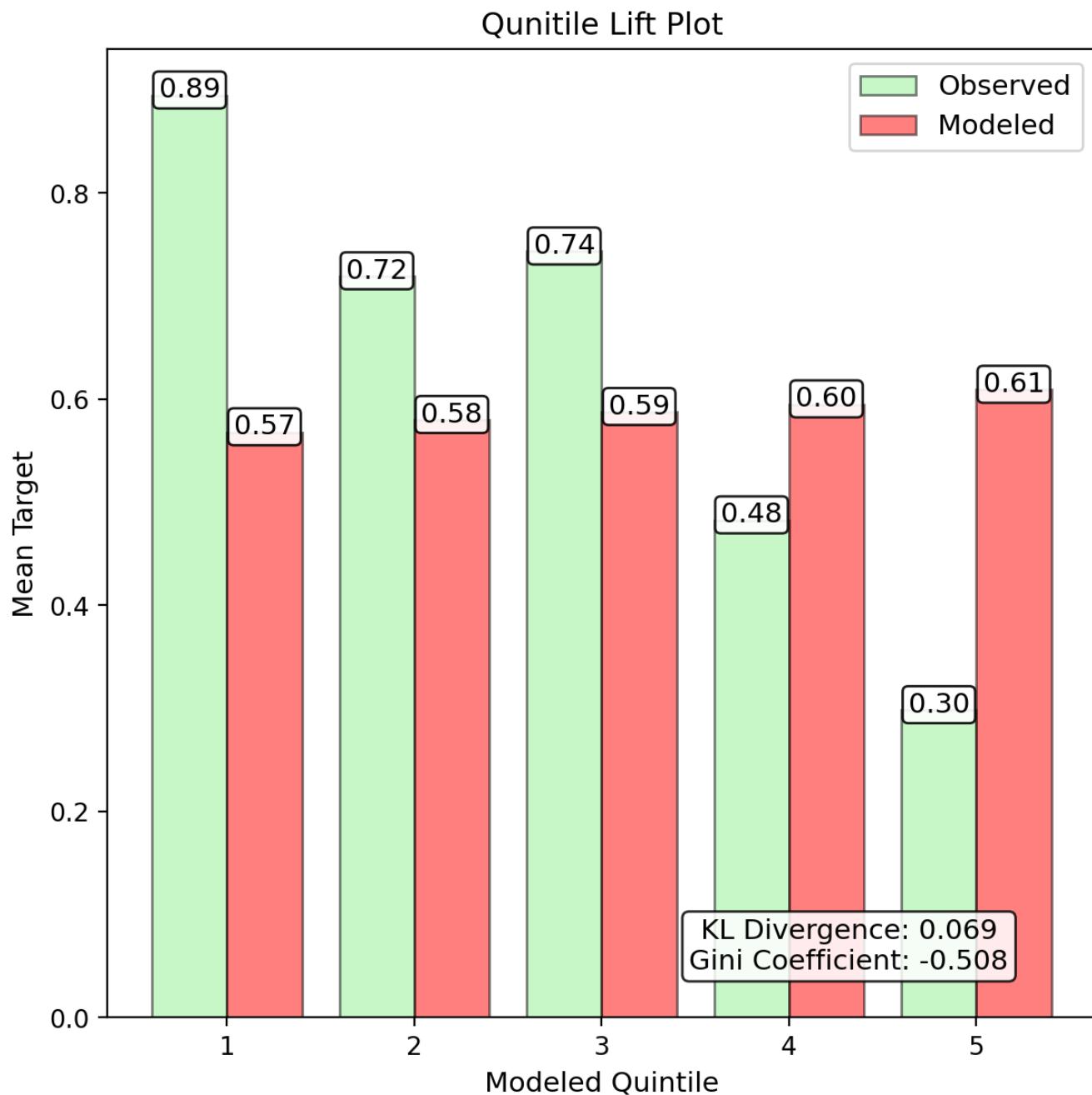
Univariate Report

Worst Smoothness - ROC Curve



Univariate Report

Worst Smoothness - Quintile Lift



Univariate Report

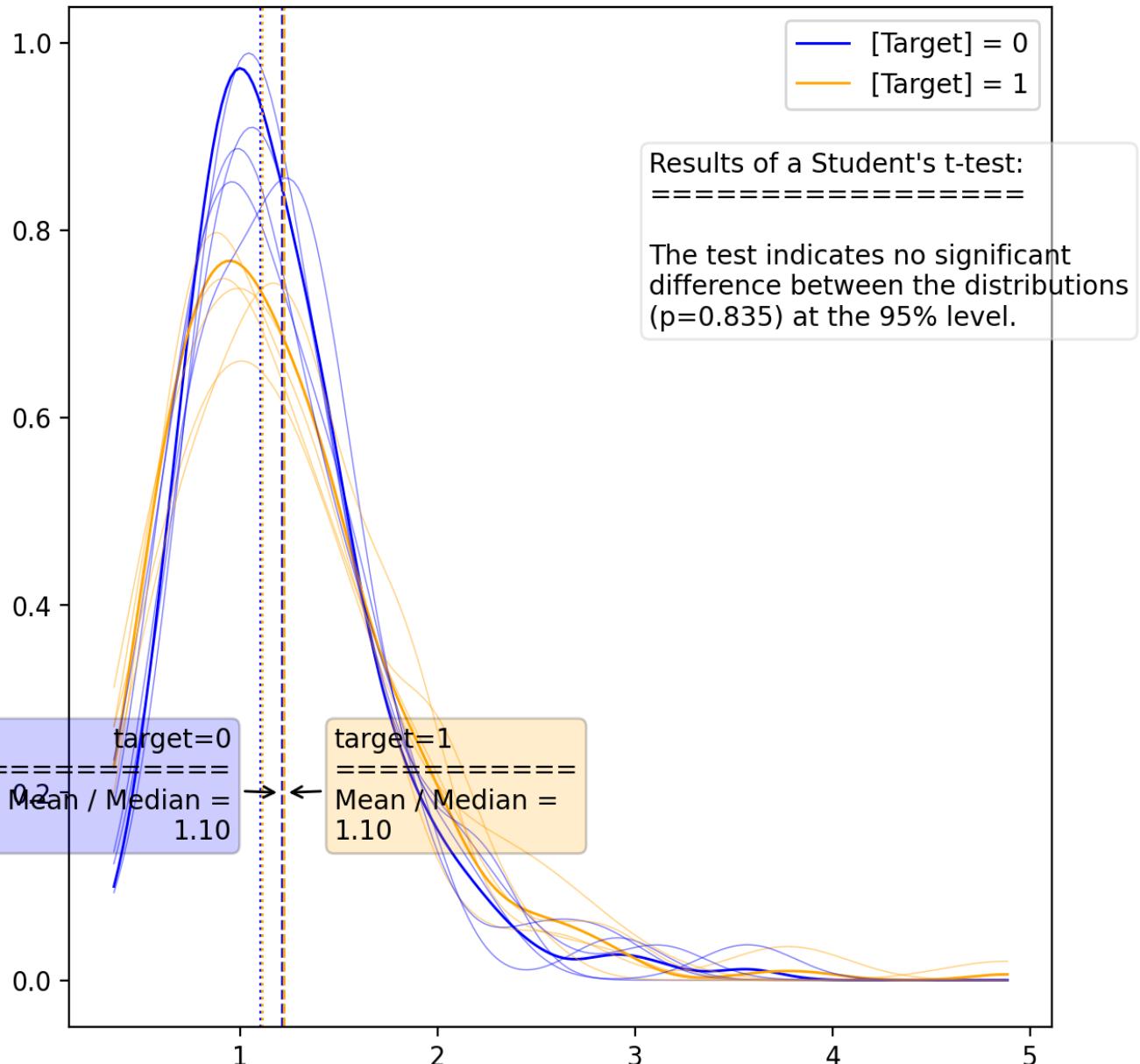
Texture Error - Results

	Fold-1	Fold-2	Fold-3	Fold-4	Fold-5	Agg. Mean	Agg. SD
Fitted Coef.	0.374	0.335	0.362	0.354	0.372	0.359	0.016
Fitted p-Value	5.8e-07	4.2e-06	8.9e-07	2.4e-06	7.5e-07	6.5e-08	1.5e-06
Fitted Std. Err.	7.5e-02	7.3e-02	7.4e-02	7.5e-02	7.5e-02	6.6e-02	1.1e-03
Conf. Int. Lower	0.227	0.192	0.218	0.207	0.225	0.229	0.015
Conf. Int. Upper	0.521	0.477	0.507	0.501	0.520	0.489	0.018
Train Accuracy	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Accuracy	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Val AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Train F1	77.3%	76.7%	77.3%	76.9%	77.2%	77.1%	0.3%
Test F1	76.3%	78.7%	75.9%	77.8%	76.8%	77.1%	1.1%
Train Precision	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Precision	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Val Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Train MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Val MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Train Log-Loss	13.33	13.60	13.32	13.52	13.39	13.43	0.13
Val Log-Loss	13.82	12.68	13.98	13.11	13.59	13.43	0.53

Univariate Report

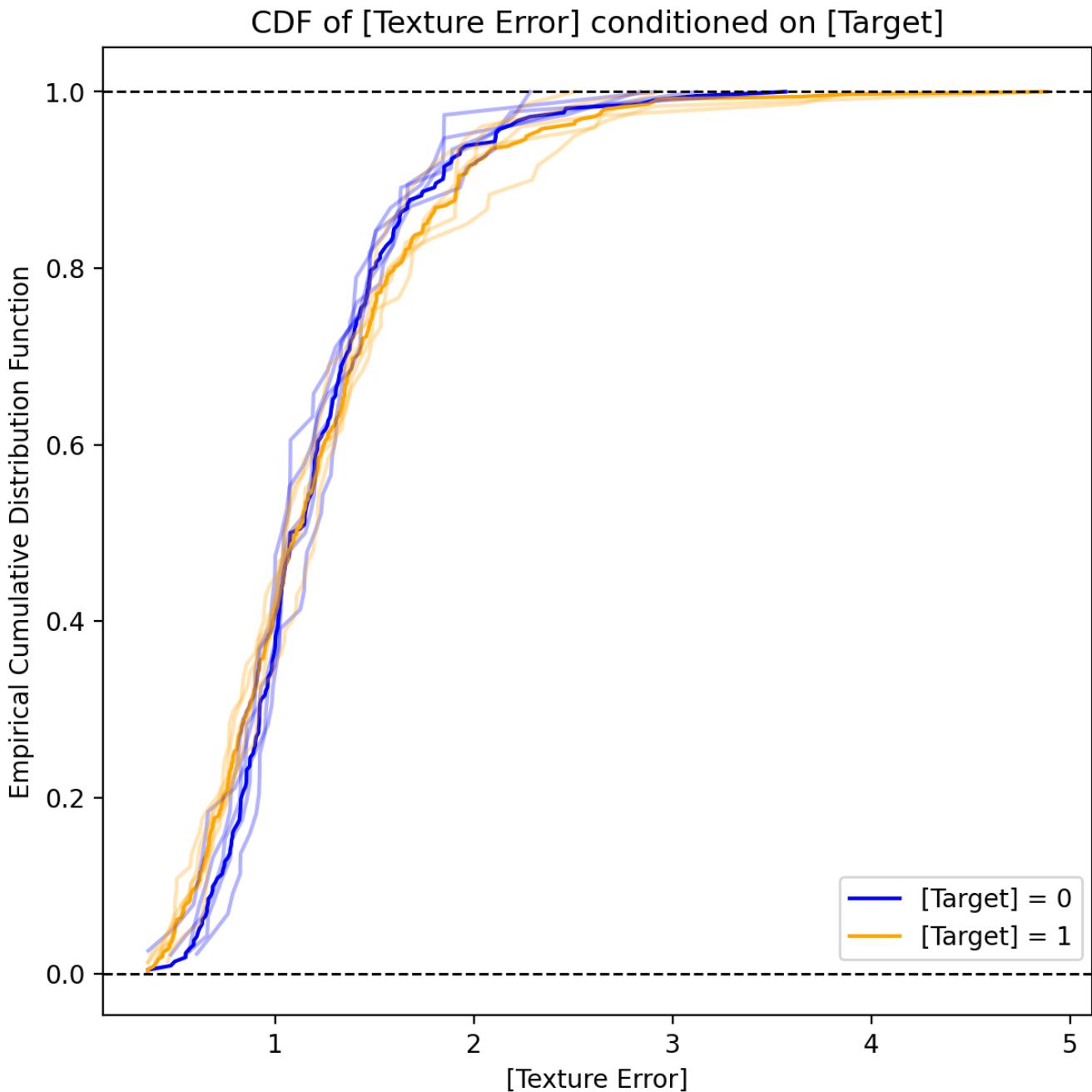
Texture Error - Kernel Density Plot

Density Plot of [[Texture Error]] by [[Target]]
Distributions by level are not significantly different at the 95% level.



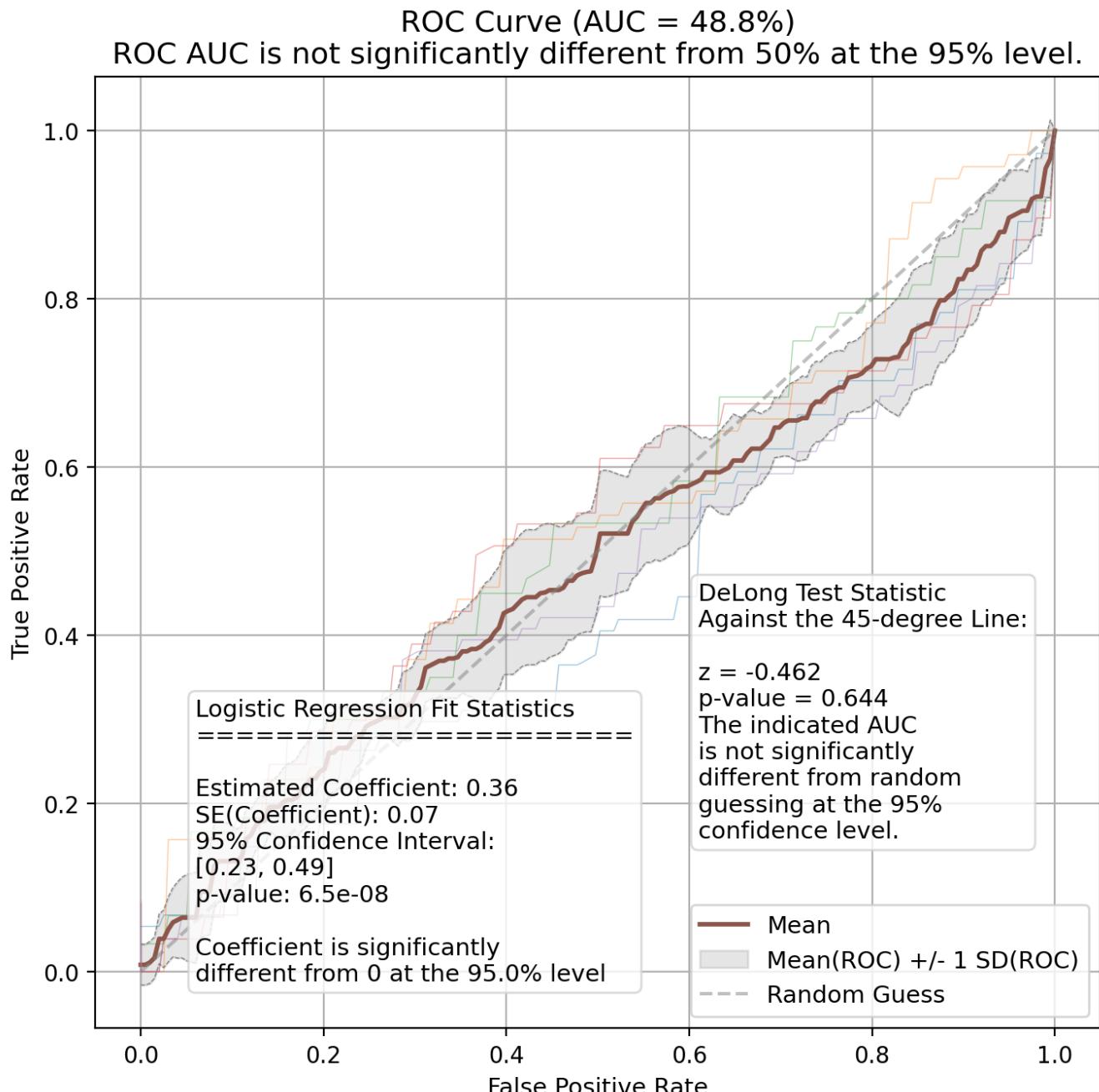
Univariate Report

Texture Error - Empirical CDF Plot



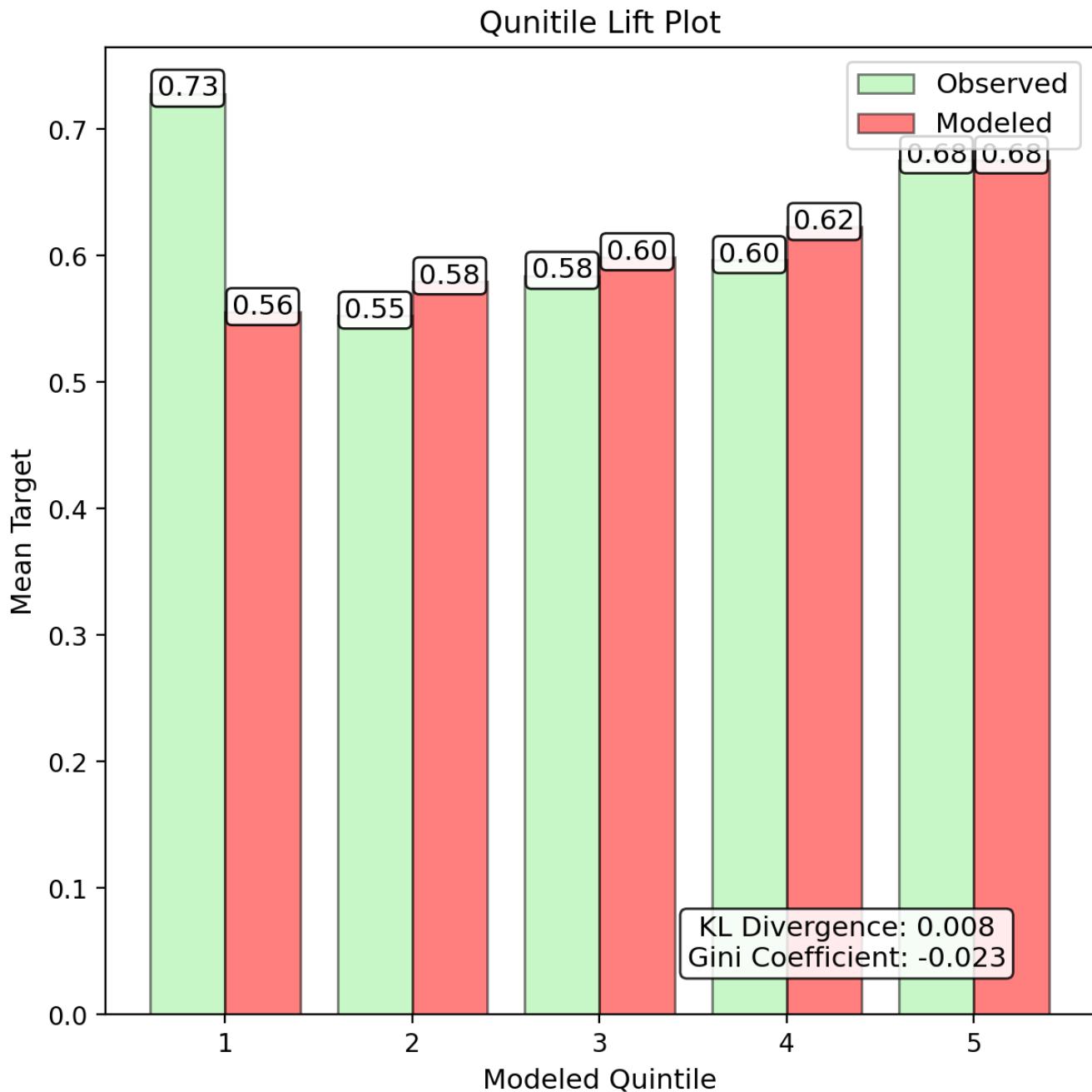
Univariate Report

Texture Error - ROC Curve



Univariate Report

Texture Error - Quintile Lift



Univariate Report

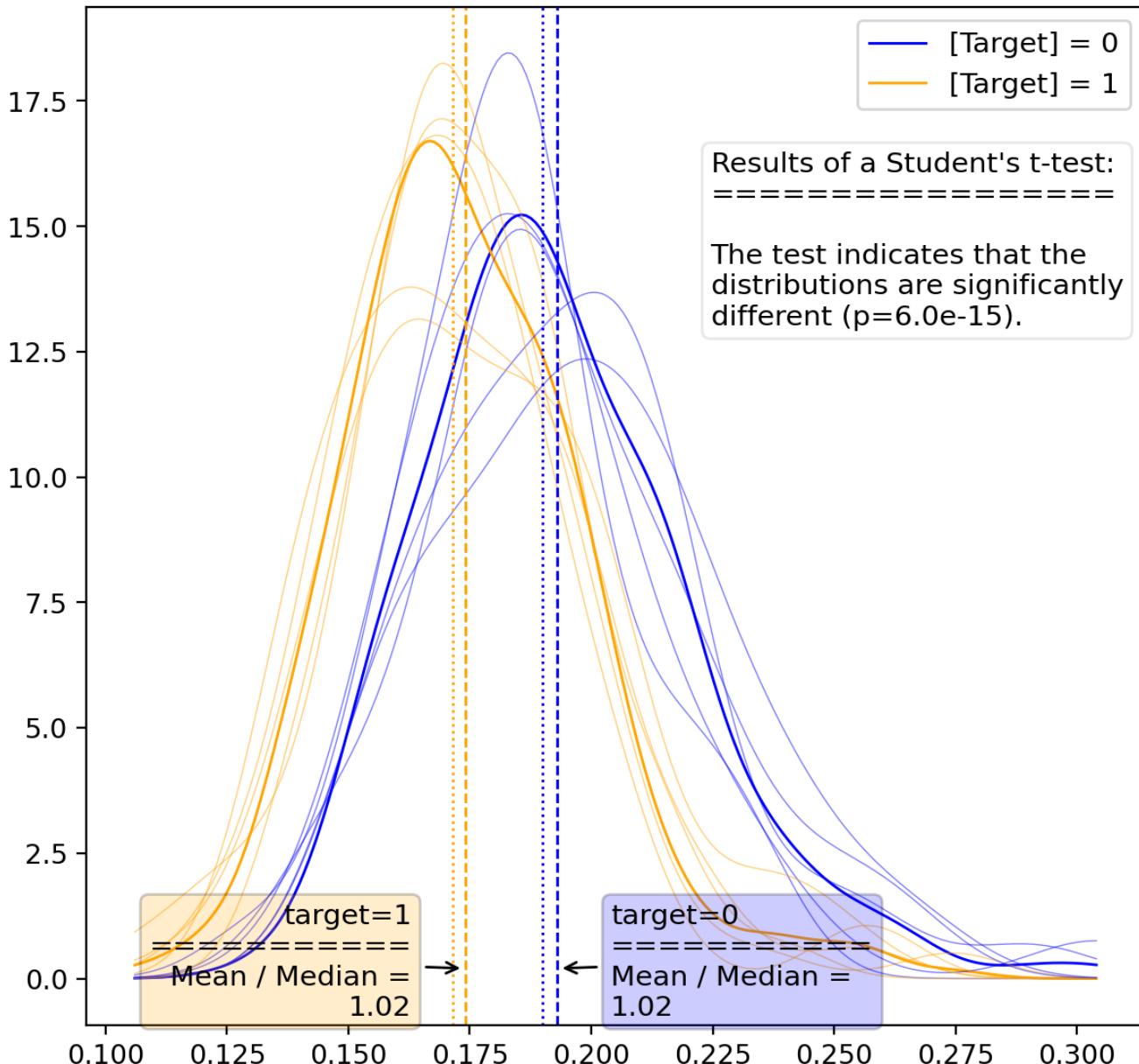
Mean Symmetry - Results

	Fold-1	Fold-2	Fold-3	Fold-4	Fold-5	Agg. Mean	Agg. SD
Fitted Coef.	2.32	2.10	2.24	2.19	2.25	2.22	0.08
Fitted p-Value	1.2e-05	4.7e-05	1.3e-05	3.7e-05	2.2e-05	2.2e-06	1.6e-05
Fitted Std. Err.	0.528	0.517	0.512	0.530	0.529	0.468	0.008
Conf. Int. Lower	1.28	1.09	1.23	1.15	1.21	1.30	0.07
Conf. Int. Upper	3.35	3.11	3.24	3.23	3.28	3.13	0.09
Train Accuracy	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Accuracy	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Val AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Train F1	77.3%	76.7%	77.3%	76.9%	77.2%	77.1%	0.3%
Test F1	76.3%	78.7%	75.9%	77.8%	76.8%	77.1%	1.1%
Train Precision	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Precision	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Val Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Train MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Val MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Train Log-Loss	13.33	13.60	13.32	13.52	13.39	13.43	0.13
Val Log-Loss	13.82	12.68	13.98	13.11	13.59	13.43	0.53

Univariate Report

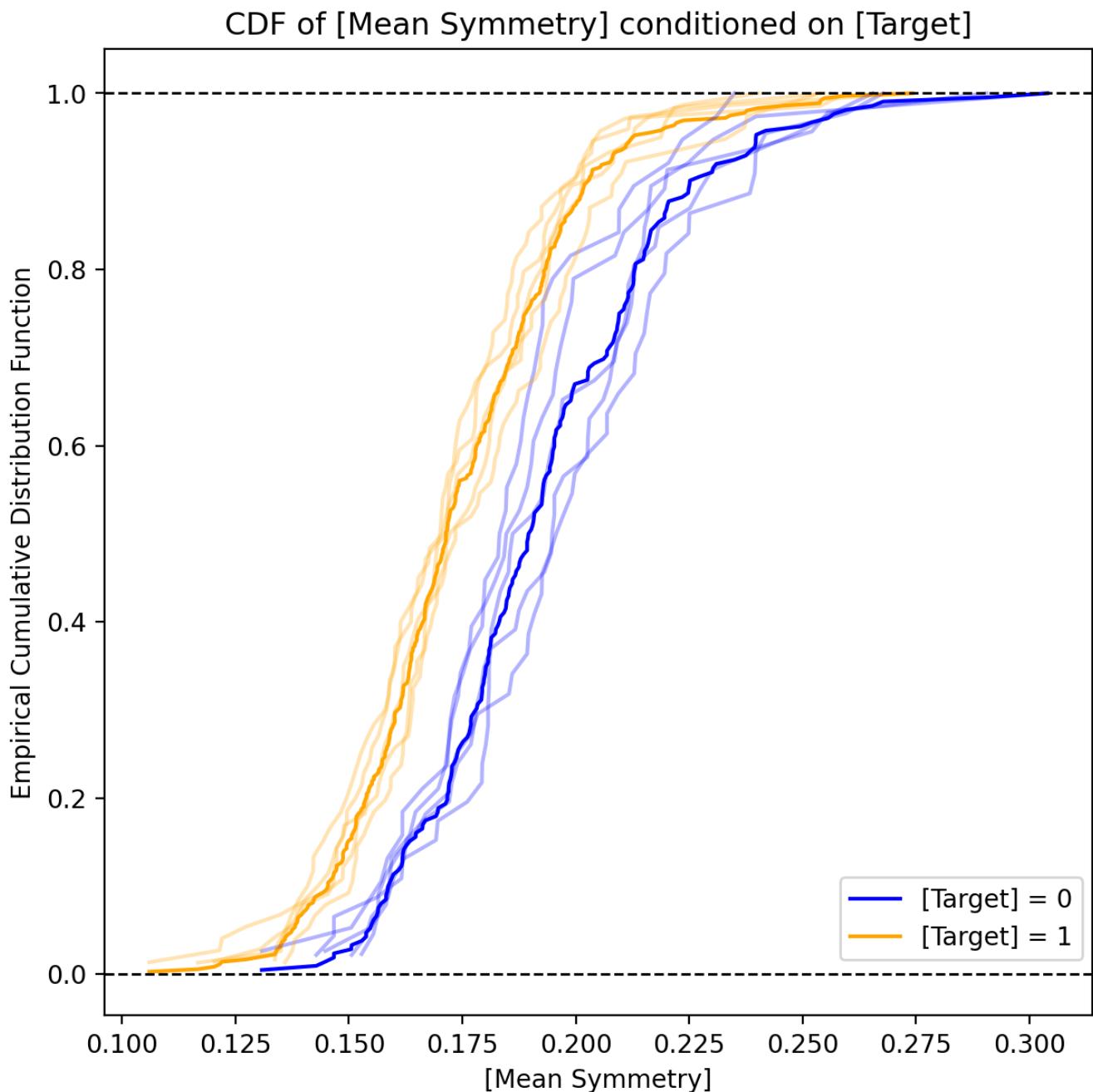
Mean Symmetry - Kernel Density Plot

Density Plot of [[Mean Symmetry]] by [[Target]]
Distributions by level are significantly different at the 95% level.



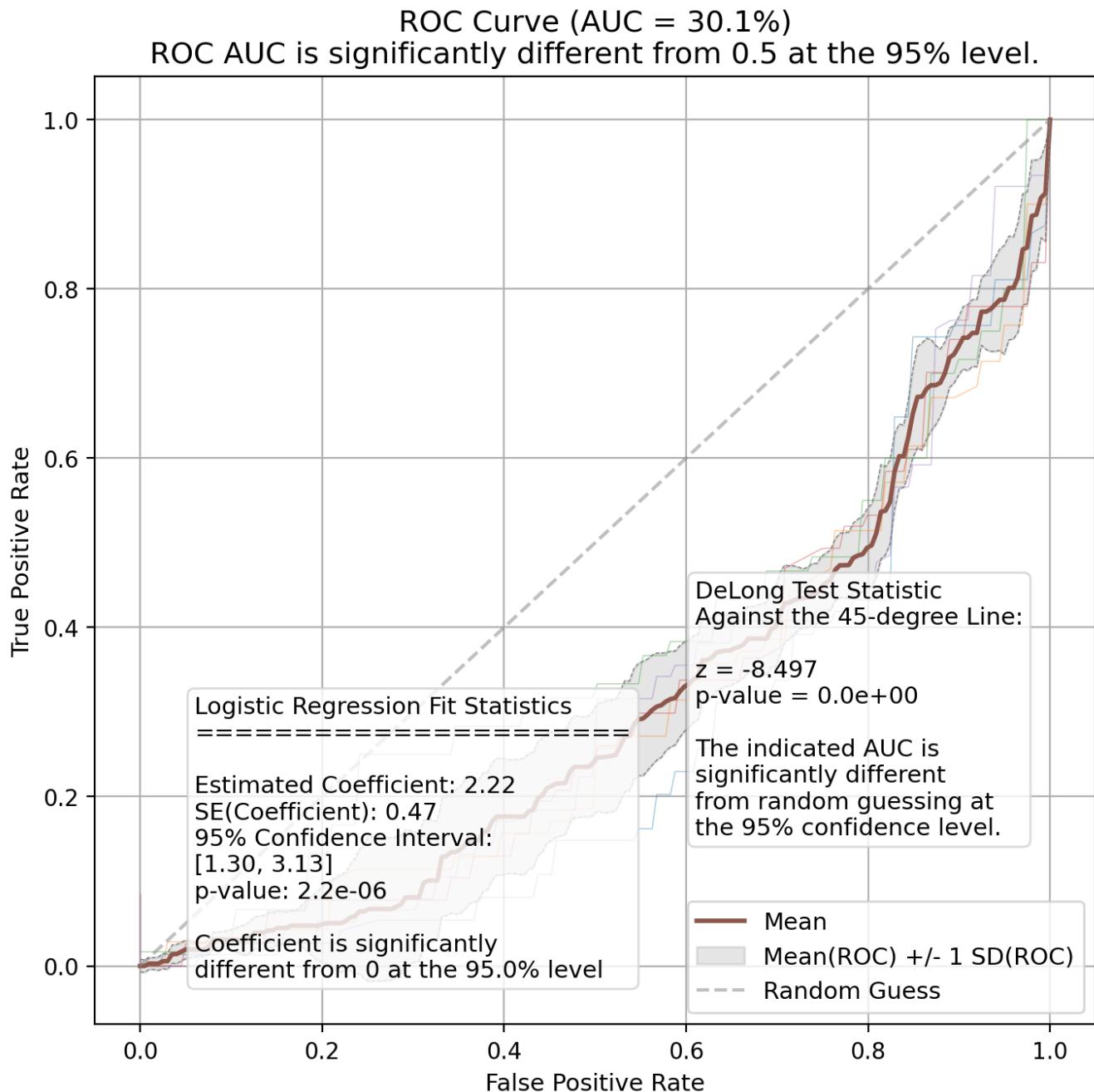
Univariate Report

Mean Symmetry - Empirical CDF Plot



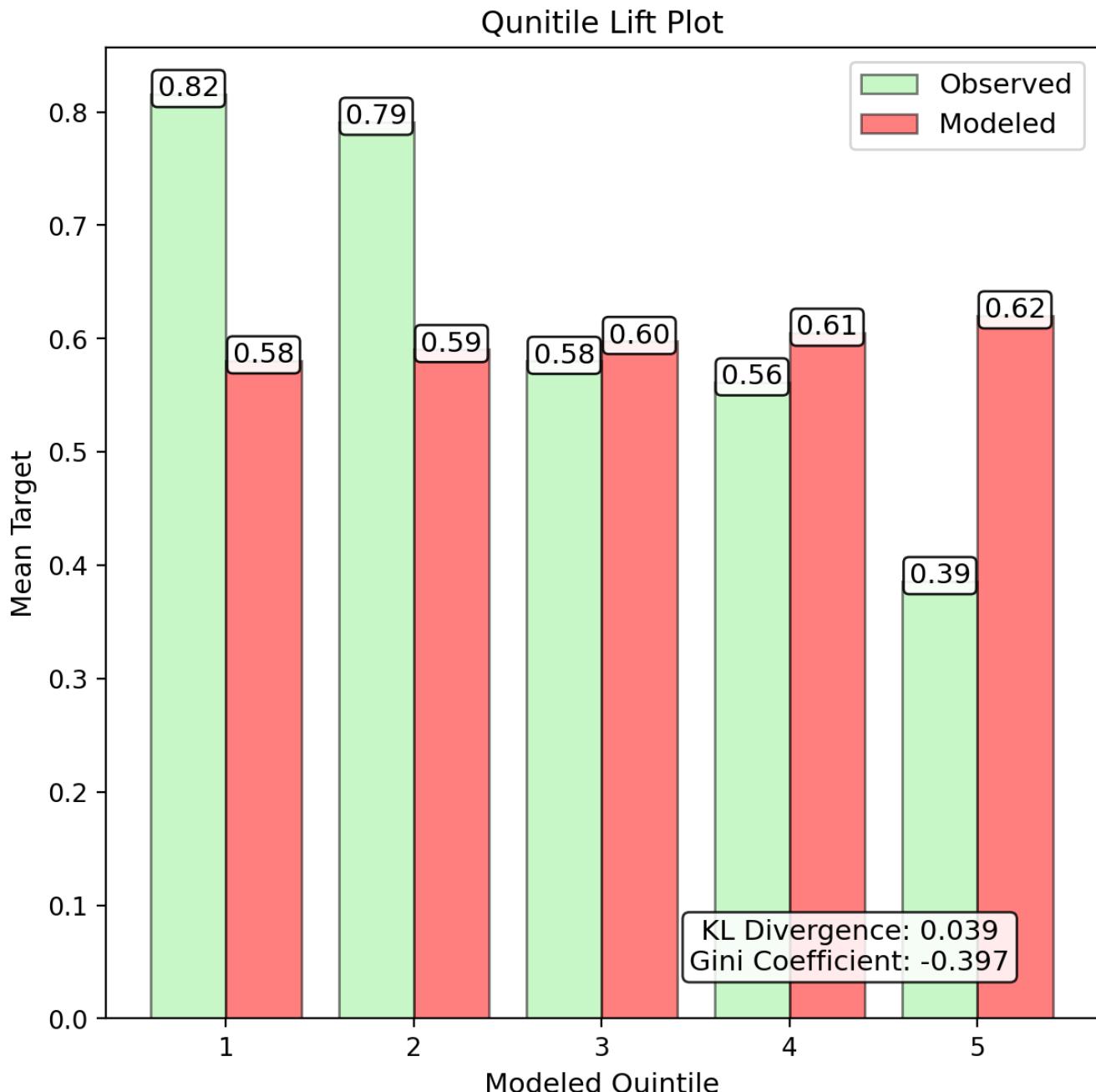
Univariate Report

Mean Symmetry - ROC Curve



Univariate Report

Mean Symmetry - Quintile Lift



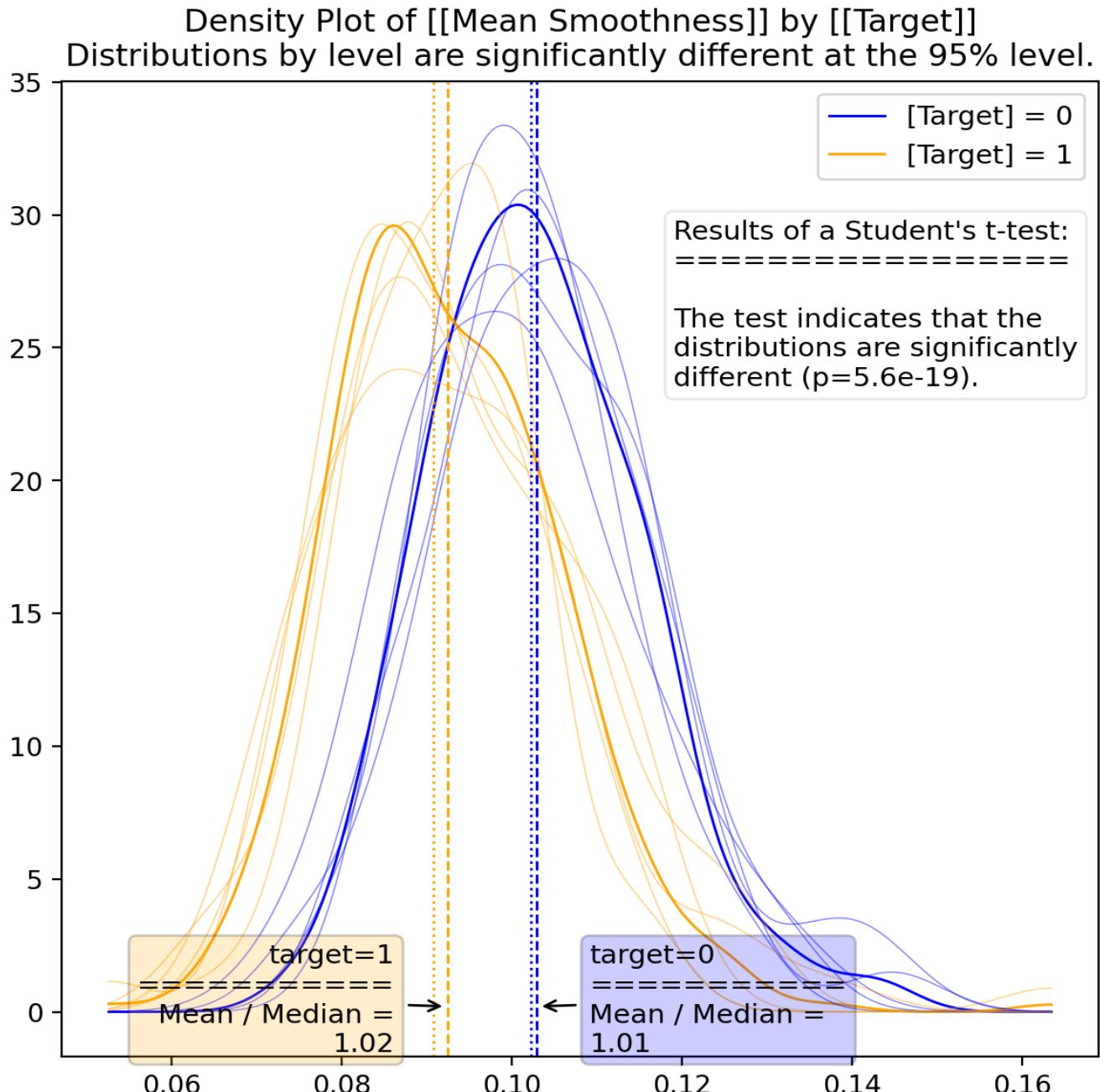
Univariate Report

Mean Smoothness - Results

	Fold-1	Fold-2	Fold-3	Fold-4	Fold-5	Agg. Mean	Agg. SD
Fitted Coef.	4.27	3.90	4.21	4.12	4.14	4.13	0.14
Fitted p-Value	1.7e-05	5.8e-05	1.3e-05	3.2e-05	3.4e-05	2.7e-06	1.7e-05
Fitted Std. Err.	0.993	0.969	0.967	0.992	0.999	0.880	0.015
Conf. Int. Lower	2.32	2.00	2.32	2.18	2.18	2.40	0.13
Conf. Int. Upper	6.21	5.80	6.11	6.07	6.10	5.85	0.15
Train Accuracy	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Accuracy	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Val AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Train F1	77.3%	76.7%	77.3%	76.9%	77.2%	77.1%	0.3%
Test F1	76.3%	78.7%	75.9%	77.8%	76.8%	77.1%	1.1%
Train Precision	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Precision	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Val Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Train MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Val MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Train Log-Loss	13.33	13.60	13.32	13.52	13.39	13.43	0.13
Val Log-Loss	13.82	12.68	13.98	13.11	13.59	13.43	0.53

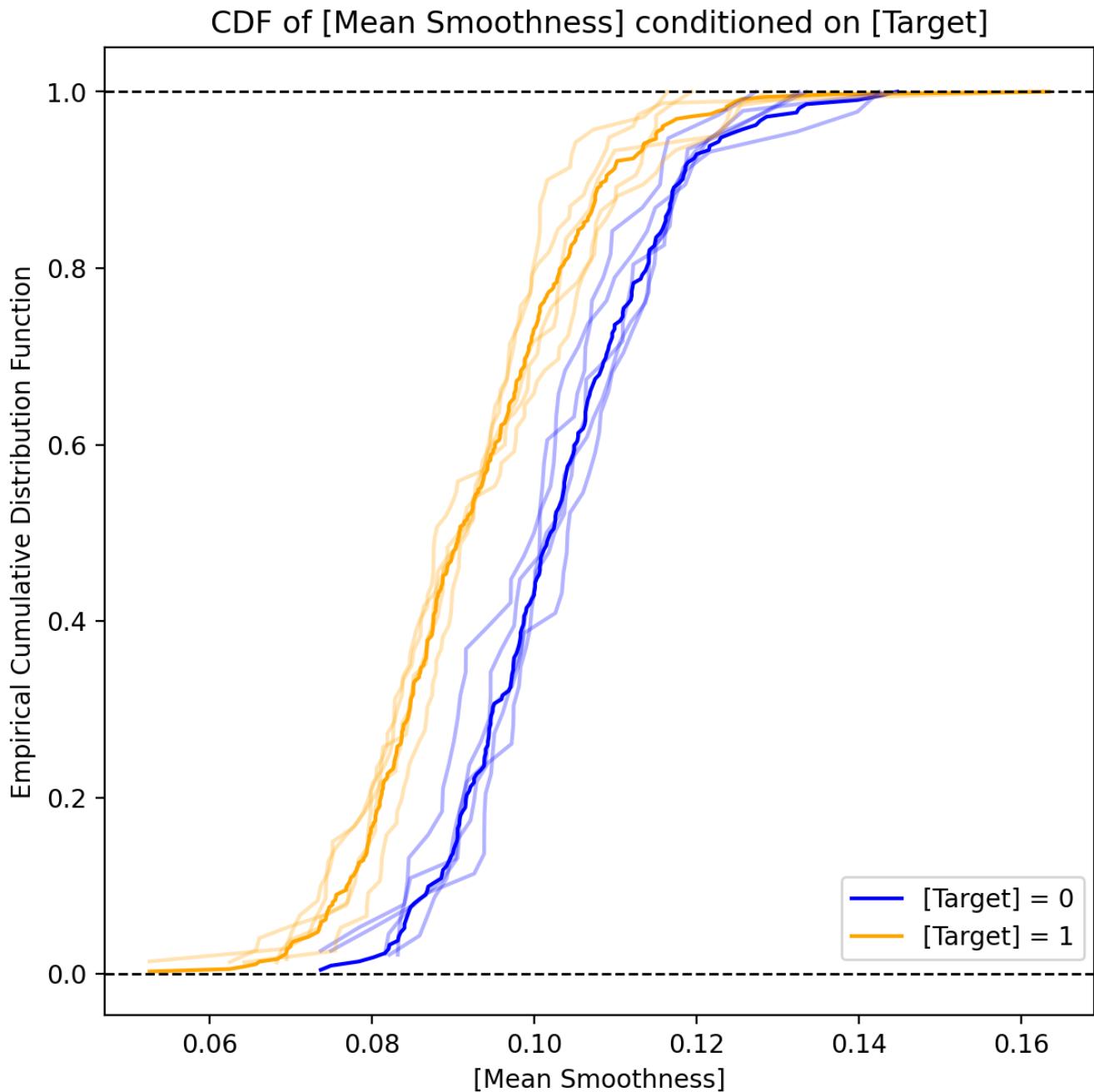
Univariate Report

Mean Smoothness - Kernel Density Plot



Univariate Report

Mean Smoothness - Empirical CDF Plot

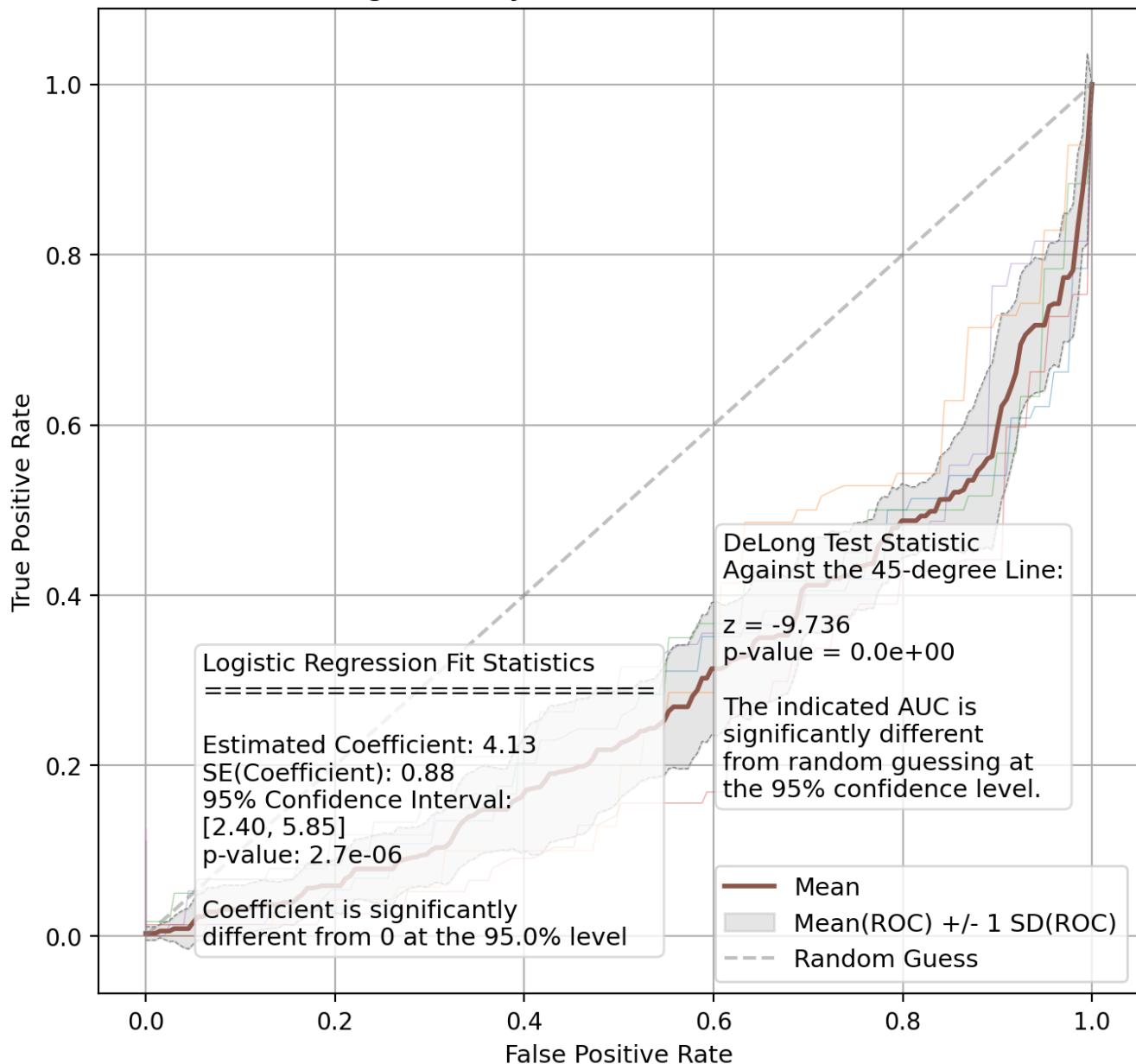


Univariate Report

Mean Smoothness - ROC Curve

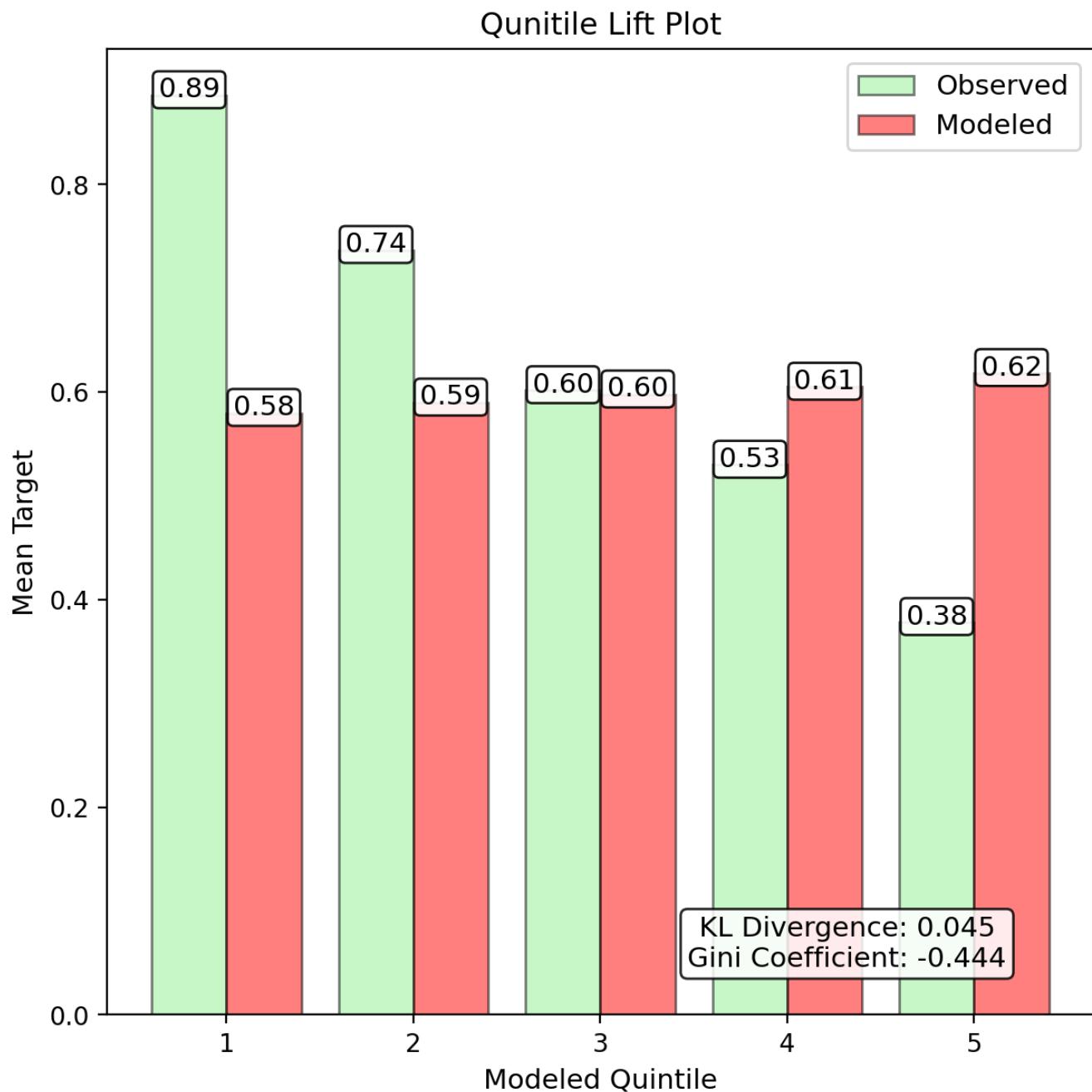
ROC Curve (AUC = 27.8%)

ROC AUC is significantly different from 0.5 at the 95% level.



Univariate Report

Mean Smoothness - Quintile Lift



Univariate Report

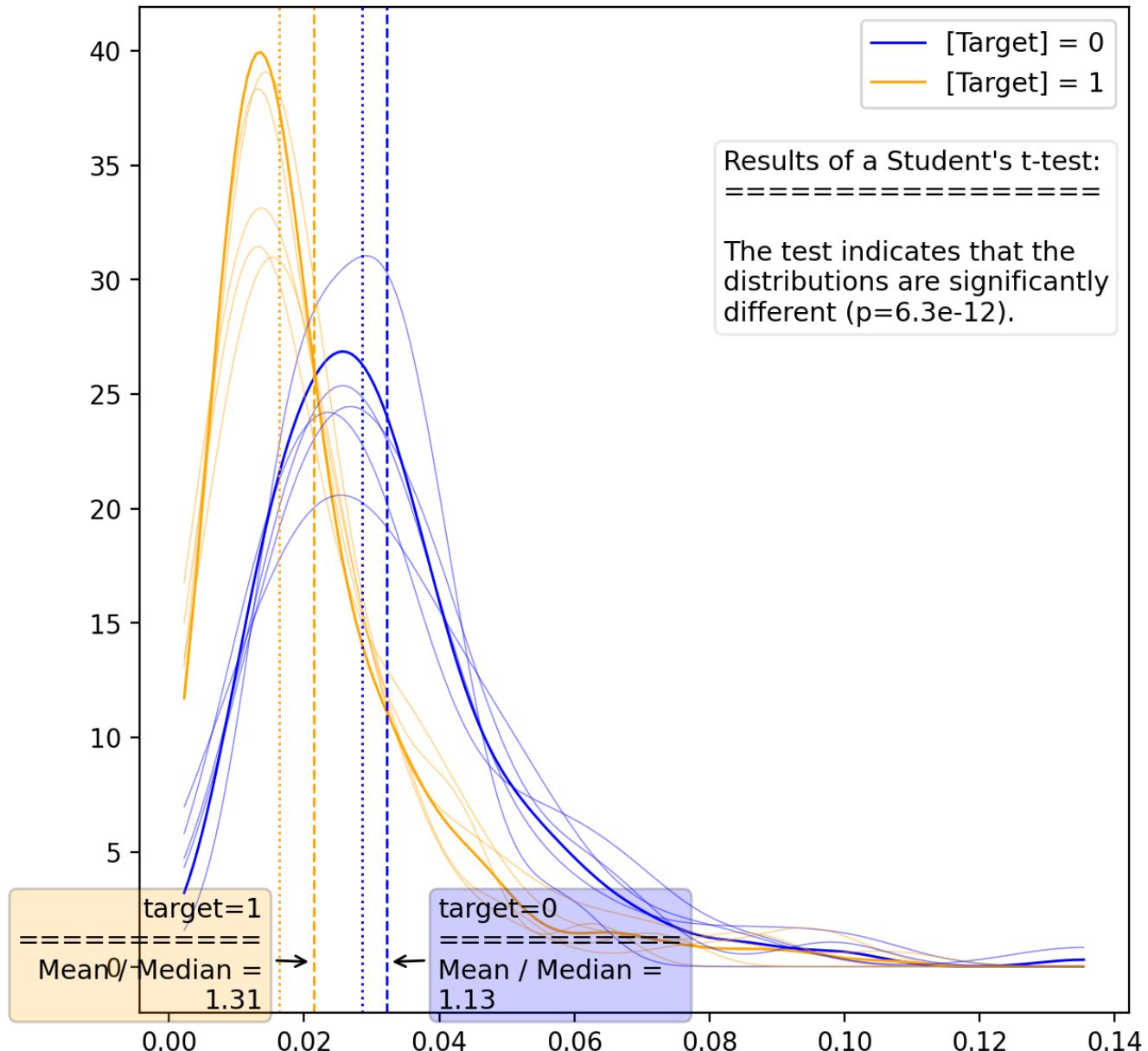
Compactness Error - Results

	Fold-1	Fold-2	Fold-3	Fold-4	Fold-5	Agg. Mean	Agg. SD
Fitted Coef.	3.54	1.49	3.56	2.28	3.53	2.89	0.95
Fitted p-Value	0.239	0.615	0.235	0.468	0.241	0.286	0.174
Fitted Std. Err.	3.01	2.96	3.00	3.15	3.02	2.70	0.07
Conf. Int. Lower	-2.4e+00	-4.3e+00	-2.3e+00	-3.9e+00	-2.4e+00	-2.4e+00	9.7e-01
Conf. Int. Upper	9.44	7.29	9.44	8.45	9.45	8.18	0.95
Train Accuracy	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Accuracy	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Val AUC	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Train F1	77.3%	76.7%	77.3%	76.9%	77.2%	77.1%	0.3%
Test F1	76.3%	78.7%	75.9%	77.8%	76.8%	77.1%	1.1%
Train Precision	63.0%	62.3%	63.1%	62.5%	62.9%	62.7%	0.4%
Val Precision	61.7%	64.8%	61.2%	63.6%	62.3%	62.7%	1.5%
Train Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Val Recall	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%
Train MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Val MCC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Train Log-Loss	13.33	13.60	13.32	13.52	13.39	13.43	0.13
Val Log-Loss	13.82	12.68	13.98	13.11	13.59	13.43	0.53

Univariate Report

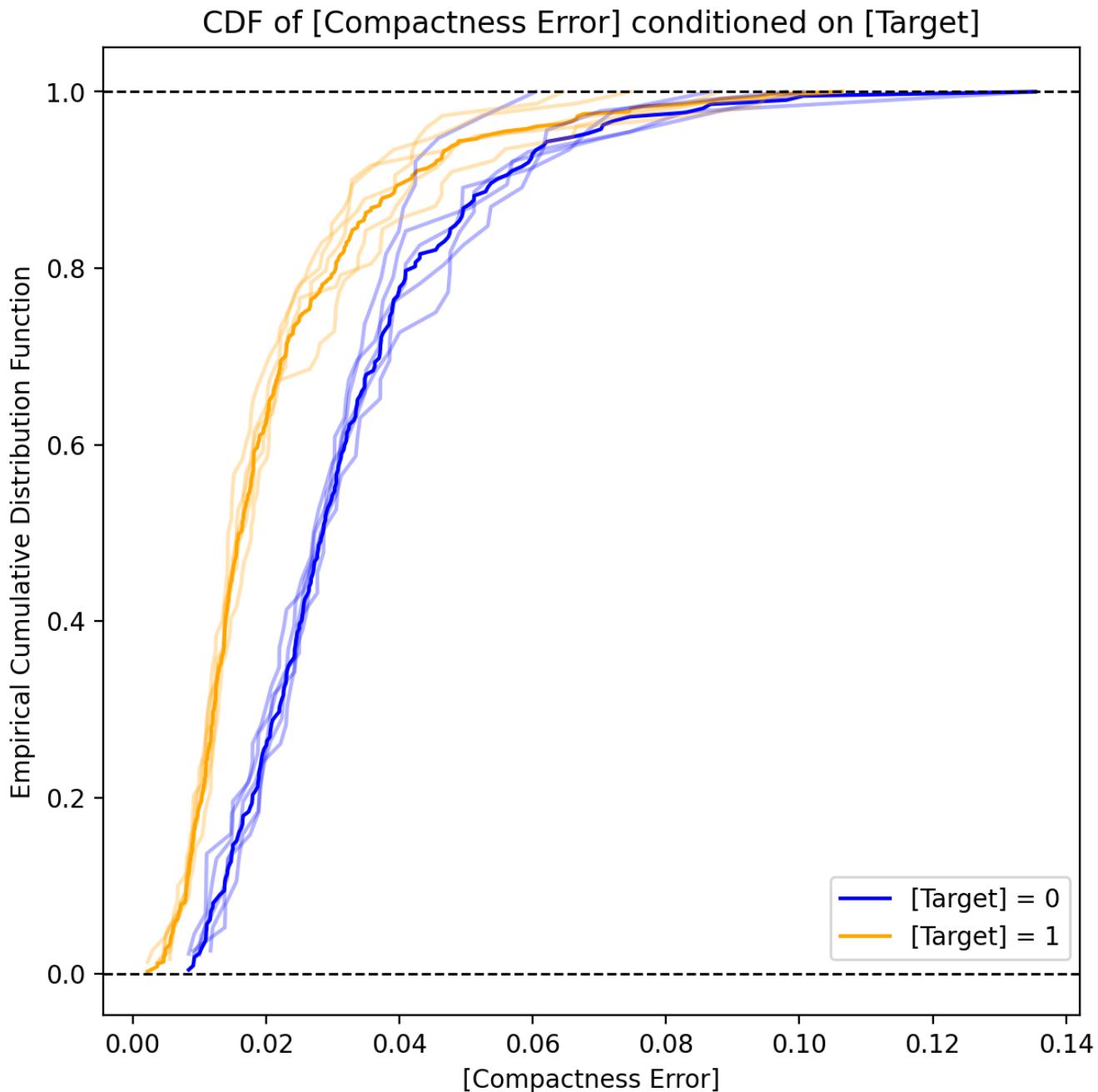
Compactness Error - Kernel Density Plot

Density Plot of [[Compactness Error]] by [[Target]]
Distributions by level are significantly different at the 95% level.



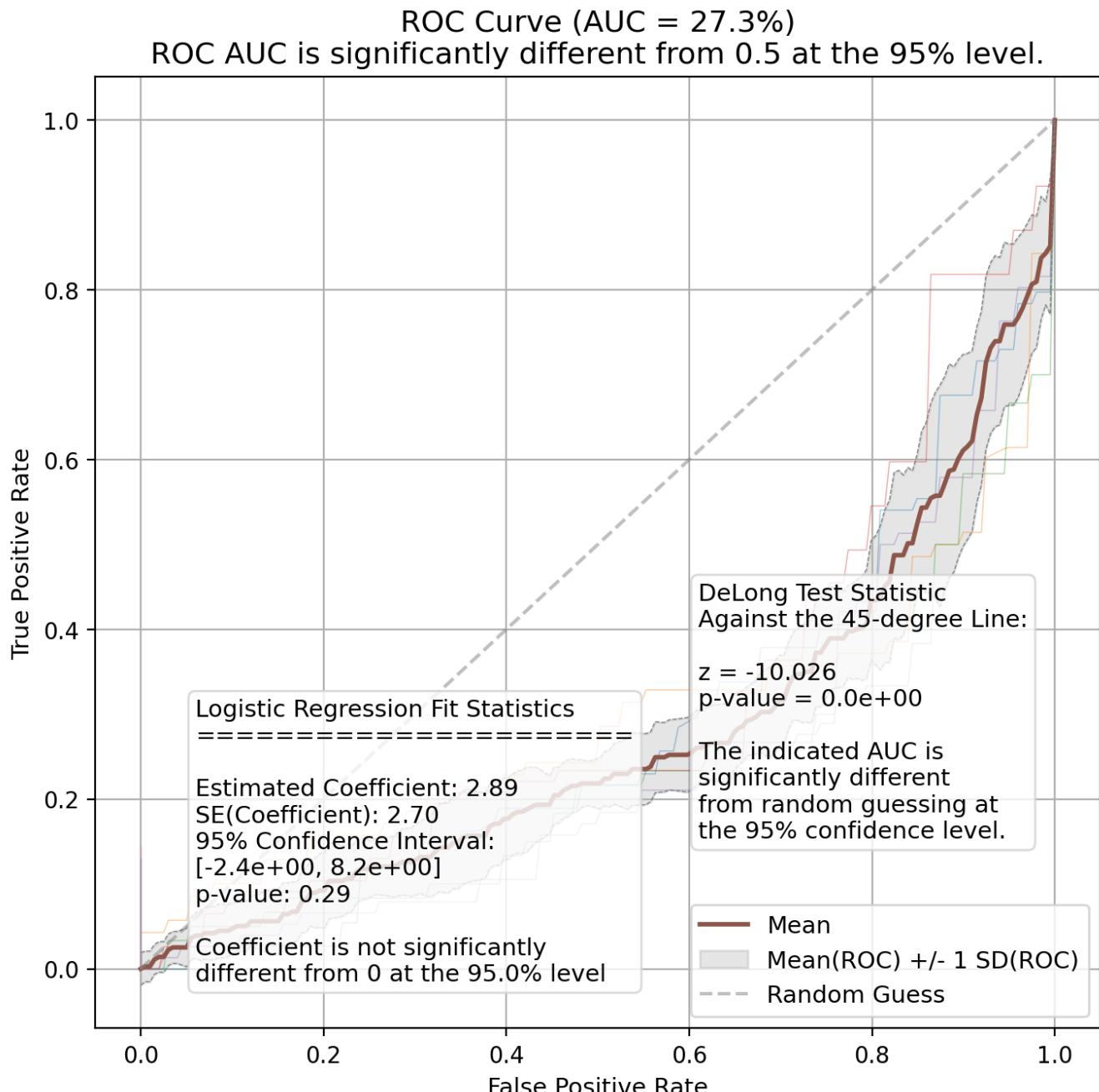
Univariate Report

Compactness Error - Empirical CDF Plot



Univariate Report

Compactness Error - ROC Curve



Univariate Report

Compactness Error - Quintile Lift

