

Classification Report				
	precision	recall	f1-score	support
0	0.66	0.92	0.77	59
1	0.29	0.07	0.11	30
accuracy			0.63	89
macro avg	0.47	0.49	0.44	89
weighted avg	0.53	0.63	0.54	89

Accuracy  
Accuracy: 0.6292134831460674

# Optimal Win Ranges Summary for Long Trades

	feature	trade_type	optimal_win_range_start	optimal_win_range_end	
0	62_ZLEMA_percent_away	LE	-0.009227	0.309345	
1	62_ZLEMA_percent_away	LE	1.082119	3.141798	
2	ADX	LE	-0.545905	2.736595	
3	CHAIKIN	LE	-2.607515	-0.509294	
4	DM_ADX_PLOT	LE	-0.545905	2.736595	
5	VOLUME	LE	-0.976899	0.230321	
6	VOLUME	LE	0.632728	1.431444	
7	RIND	LE	-0.981483	-0.329216	
8	RIND	LE	0.310507	1.025491	
9	RSI_DEFAULT	LE	-1.712182	-0.451679	
10	RSI_DEFAULT	LE	-0.068315	0.449994	
11	VROC	LE	-0.819725	0.127809	
12	VROC	LE	1.038426	1.622943	
13	VROC	LE	3.733360	4.416322	
14	1000_SMA_percent_away	LE	-2.513960	-1.537367	
15	1000_SMA_percent_away	LE	0.225466	1.620008	
16	14_MA_ENVELOPES_UPPER_percent_away	LE	-0.377066	0.152099	
17	14_MA_ENVELOPES_UPPER_percent_away	LE	0.336326	0.724380	
18	14_MA_ENVELOPES_UPPER_percent_away	LE	1.034039	3.538751	

# Optimal Win Ranges Summary for Short Trades

	feature	trade_type	optimal_win_range_start	optimal_win_range_end	
0	62_ZLEMA_percent_away	SE	-8.786650	-1.266436	
1	62_ZLEMA_percent_away	SE	-0.194903	0.944818	
2	ADX	SE	-1.385542	-0.462664	
3	ADX	SE	-0.152036	0.757337	
4	ADX	SE	2.035861	2.612098	
5	CHAIKIN	SE	-1.265811	0.435224	
6	CHAIKIN	SE	3.142159	3.452925	
7	DM_ADX_PLOT	SE	-1.385542	-0.462664	
8	DM_ADX_PLOT	SE	-0.152036	0.757337	
9	DM_ADX_PLOT	SE	2.035861	2.612098	
10	VOLUME	SE	-1.293947	-0.365052	
11	VOLUME	SE	1.408291	2.736892	
12	VOLUME	SE	3.975418	4.330086	
13	RIND	SE	-0.102113	0.560963	
14	RSI_DEFAULT	SE	-1.619338	-0.530473	
15	RSI_DEFAULT	SE	1.454436	9.711659	
16	VROC	SE	-0.838718	-0.076650	
17	VROC	SE	2.515743	4.107921	
18	VROC	SE	5.502778	5.958658	
19	1000_SMA_percent_away	SE	-1.281663	-0.955644	
20	1000_SMA_percent_away	SE	0.256165	1.523335	
21	1000_SMA_percent_away	SE	3.614781	4.537478	
22	14_MA_ENVELOPES_UPPER_percent_away	SE	-2.598799	-2.563443	
23	14_MA_ENVELOPES_UPPER_percent_away	SE	-2.390201	-1.057293	
24	14_MA_ENVELOPES_UPPER_percent_away	SE	-0.671917	0.933229	

# Optimal Win Ranges Summary for Both Long and Short Trades

	feature	trade_type	optimal_win_range_start	optimal_win_range_end	
0	62_ZLEMA_percent_away		-8.786650	-0.965696	
1	62_ZLEMA_percent_away		-0.547782	0.120880	
2	62_ZLEMA_percent_away		1.171634	3.141798	
3	ADX		-0.476944	1.647026	
4	ADX		1.982632	2.736595	
5	CHAIKIN		-2.835997	0.238950	
6	CHAIKIN		2.994954	3.559240	
7	CHAIKIN		5.284809	5.333877	
8	DM_ADX_PLOT		-0.476944	1.647026	
9	DM_ADX_PLOT		1.982632	2.736595	
10	VOLUME		-1.293947	-0.037950	
11	VOLUME		0.925387	1.650938	
12	VOLUME		1.846044	2.358198	
13	RIND		-0.704866	0.693373	
14	RSI_DEFAULT		-1.712182	-0.500043	
15	RSI_DEFAULT		1.478260	9.711659	
16	VROC		-0.838718	-0.049433	
17	VROC		3.495545	4.325655	
18	VROC		5.686491	5.958658	
19	1000_SMA_percent_away		-2.513960	-1.638706	
20	1000_SMA_percent_away		0.217678	1.954068	
21	1000_SMA_percent_away		3.584581	4.537478	
22	14_MA_ENVELOPES_UPPER_percent_away			-2.598799	-1.112025
23	14_MA_ENVELOPES_UPPER_percent_away			-0.485368	0.067564
24	14_MA_ENVELOPES_UPPER_percent_away			1.511332	3.538751

# Loss Mitigation Analysis

	count	mean	std	min	25%	50%	75%	max	
ADX	161.0	-0.086724	1.033868e+00	-1.856146	-0.816921	-0.279124	0.611044	2.684127	
AROON_DOWN	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
AROON_UP	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	0.000
ATR	161.0	0.089757	9.908347e-01	-1.569222	-0.625525	-0.094696	0.731039	3.473657	
AWESOME	161.0	-0.039341	9.819450e-01	-1.229055	-1.014987	-0.558666	0.982758	1.162	
CCI	161.0	-0.042472	1.017479e+00	-1.710272	-1.018385	-0.132852	0.930918	1.539593	
CHAIKIN	161.0	0.152176	1.065306e+00	-2.835997	-0.381632	-0.038888	0.535399	4.8915	
CMO	161.0	-0.033158	9.753289e-01	-2.427354	-0.717361	-0.041638	0.634085	2.821059	
DISPARITY_INDEX	161.0	0.062717	7.841291e-01	-2.137917	-0.022680	-0.022680	-0.022680	2.1	
DM_ADX_PLOT	161.0	-0.086724	1.033868e+00	-1.856146	-0.816921	-0.279124	0.611044	2.1	
DM_DI_MINUS	161.0	0.016292	9.882151e-01	-2.355034	-0.847005	0.258633	0.852820	1.56	
DM_DI_PLUS	161.0	-0.036719	9.123487e-01	-2.164098	-0.778099	0.060892	0.740956	1.40	
DYNAMIC_MOMENTUM	161.0	0.024852	9.822374e-01	-1.147007	-1.128881	0.117277	1.181169		
FISHER_TRANSFORM	161.0	-0.034812	9.922686e-01	-1.176961	-1.165929	-0.299934	1.109376		
LIN_REG_SLOPE	161.0	-0.063989	1.012748e+00	-1.830464	-1.000933	-0.159880	0.888555	1.1	
MACD_AVG	161.0	-0.037604	9.413144e-01	-1.324624	-0.938041	-0.531749	0.891787	1.24	
MACD_DEFAULT	161.0	-0.042298	9.567781e-01	-1.278772	-0.975890	-0.557781	0.926998	1.1	
MACD_DIFF	161.0	-0.013007	7.318337e-01	-1.361020	-0.571660	-0.030803	0.539290	1.44	
MFI	161.0	0.090901	9.776886e-01	-1.900620	-0.671071	0.160100	0.961028	2.040925	
MOMENTUM	161.0	-0.029736	9.765790e-01	-2.518763	-0.537387	-0.042043	0.453301	2.93	
PFE	161.0	-0.036801	9.785148e-01	-1.279243	-1.097408	-0.272154	1.070633	1.210506	
RIND	161.0	0.024435	1.066203e+00	-1.480718	-0.967343	-0.046757	0.863972	2.777942	
RSI_AVERAGE	161.0	-0.019465	9.643881e-01	-1.611402	-0.846854	-0.350340	0.833380	1.5	
RSI_DEFAULT	161.0	0.045158	8.068842e-01	-1.696035	-0.501174	-0.016771	0.713870	1.61	
RSS	161.0	-0.052284	9.967916e-01	-1.288471	-1.123238	-0.145975	1.021024	1.234005	
RVI	161.0	-0.036774	9.868984e-01	-1.346030	-1.008510	-0.618802	0.959318	1.300526	
R_SQUARED	161.0	0.079282	1.223987e+00	-0.235038	-0.235038	-0.235038	-0.235038	6.4	
STOCH_FAST_D	161.0	-0.060309	9.996305e-01	-1.187456	-1.017111	-0.856491	0.951241	1.1	
STOCH_FAST_K	161.0	0.047957	1.016528e+00	-1.801193	-0.996574	0.103517	1.034170	2.1	
TRIX_DEFAULT	161.0	-0.004517	9.583570e-01	-1.377299	-0.037796	-0.037796	1.301707	1.3	
TRIX_SIGNAL	161.0	0.023098	9.486039e-01	-1.406677	-0.044583	-0.044583	1.317511	1.31	
VOLUME	161.0	0.087517	1.092542e+00	-1.293947	-0.671360	-0.131785	0.333772	4.561	
VOLUME_DOWN	161.0	-0.007181	9.923741e-01	-0.694961	-0.694961	-0.694961	0.478686	4.1	
VOLUME_UP	161.0	0.097487	1.161919e+00	-0.655680	-0.655680	-0.449074	0.563224	5.3	
VORTEX_MINUS	161.0	0.056227	9.905588e-01	-1.356432	-0.994989	0.270063	1.083310	1.1	
VORTEX_PLUS	161.0	-0.047229	9.841298e-01	-1.242821	-1.151938	-0.243107	1.029256	1.4	
VROC	161.0	0.111302	1.098421e+00	-0.830880	-0.545617	-0.256553	0.348074	5.32693	
WILLIAMS_%R	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.0	
strategy_amount	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000	
account_amount	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000	
DIV_BULL	161.0	0.060427	1.003068e+00	-0.971073	-0.971073	1.029789	1.029789	1.0297	
DIV_BEAR	161.0	-0.060427	1.003068e+00	-1.029789	-1.029789	-1.029789	0.971073	0.971	
CHOP_INDEX	161.0	0.065839	9.944245e-01	-1.380297	-0.664986	-0.384246	0.717563	2.53	
AROON_UP	161.0	-0.032107	9.884962e-01	-1.223579	-1.223579	0.163214	0.933510	0.93	
AROON_DOWN	161.0	0.062059	1.002952e+00	-1.159877	-1.159877	0.993562	0.993562	0.99	
ACCUM_DIST	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000	
OBV	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	
WILLIAMS_R	161.0	0.047957	1.016528e+00	-1.801193	-0.996574	0.103517	1.034170	2.50	
CHANDE_CMO	161.0	-0.033158	9.753289e-01	-2.427354	-0.717361	-0.041638	0.634085	2.8	
TSI	161.0	-0.042233	9.612796e-01	-1.273517	-1.042728	-0.231375	0.967703	1.188235	
1000_SMA_percent_away	161.0	-0.054289	9.694624e-01	-2.284117	-0.560677	-0.082181	0.619672		
144_SMA_percent_away	161.0	-0.007900	8.741756e-01	-1.824832	-0.752271	-0.264145	0.761354		
14_P_MA_ENVELOPES_LOWER_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.0000	
14_P_MA_ENVELOPES_MID_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	
14_P_MA_ENVELOPES_UPPER_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	
236_EMA_percent_away	161.0	-0.014981	9.109384e-01	-2.278749	-0.642888	-0.107425	0.728828		
382_EMA_percent_away	161.0	-0.022606	9.399239e-01	-2.535754	-0.650709	0.035614	0.624059		
618_EMA_percent_away	161.0	-0.036559	9.591799e-01	-2.526879	-0.655269	0.014647	0.536922		
62_ZLEMA_percent_away	161.0	0.007904	8.283073e-01	-1.842191	-0.762863	0.200388	0.742982		
8_ZLEMA_percent_away	161.0	0.049304	9.555986e-01	-1.970770	-0.887448	0.737721	0.940378		
ACCUM_DIST_percent_away	161.0	0.022234	9.860072e-01	-0.970893	-0.703996	-0.253135	0.36119		
APZ_LOW_percent_away	161.0	0.054962	9.560470e-01	-2.011243	-0.889745	0.744222	0.958067		
APZ_UPPER_percent_away	161.0	0.038502	9.498152e-01	-1.998469	-0.900980	0.670735	0.966535		

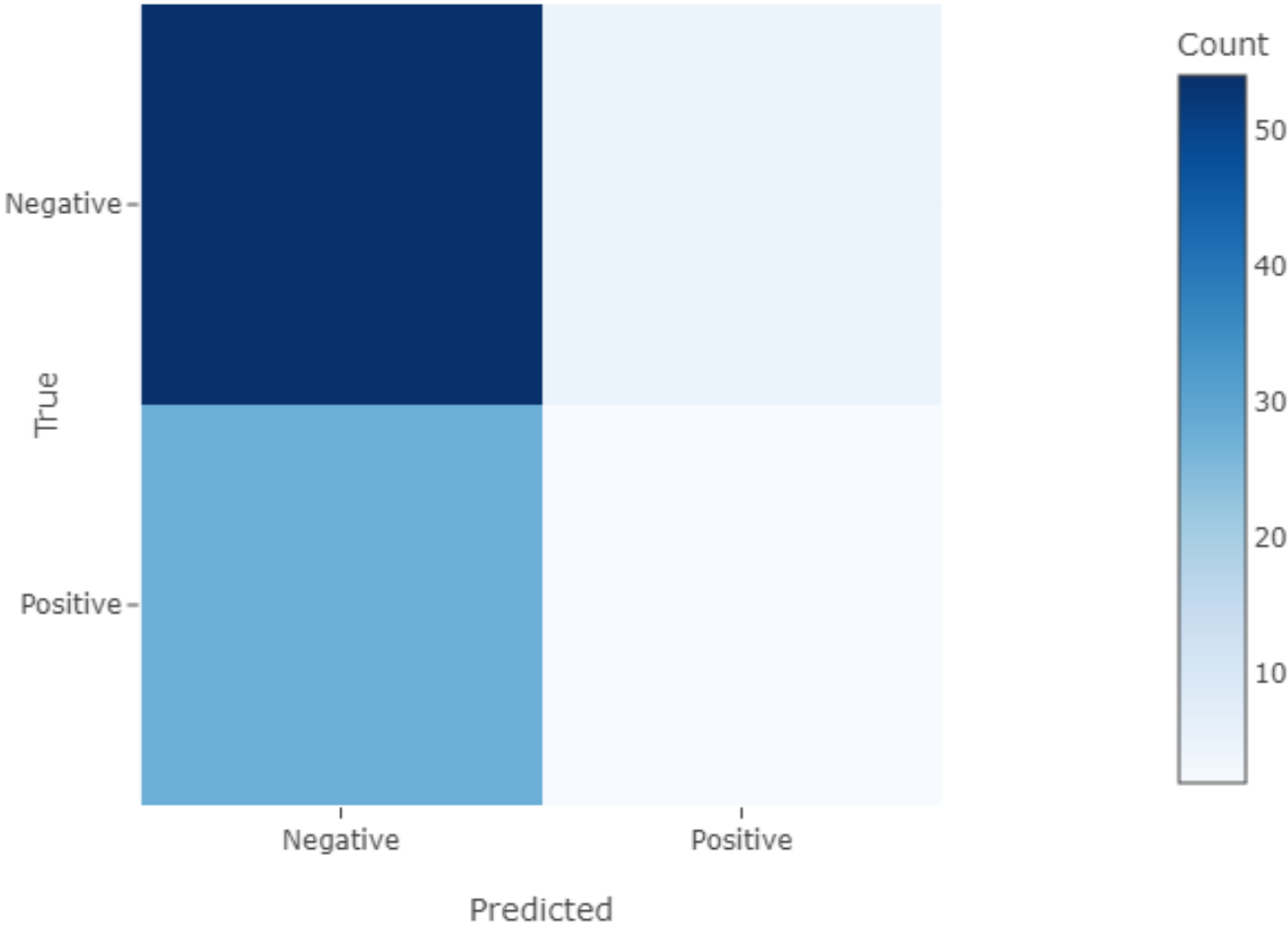
Loss Mitigation Analysis								
BOLLI_500_P_LOWER_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
BOLLI_500_P_MID_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
BOLLI_500_P_UPPER_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_C_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R1_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R2_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R3_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R4_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R5_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R6_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S1_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S2_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S3_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S4_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S5_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S6_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
LIN_REG_percent_away	161.0	0.051824	9.652111e-01	-1.811486	-0.908261	0.643023	0.979421	
LIN_REG_INTERCEPT_percent_away	161.0	-0.029671	8.137825e-01	-3.492166	-0.370264	-0.023743	0.23743	0.23743
OBV_percent_away	161.0	0.022494	9.879623e-01	-1.007527	-0.715813	-0.253923	0.369669	4.16157
VROC_percent_away	161.0	0.102744	1.264883e+00	0.003057	0.003057	0.003057	0.003057	10.3057
VWAP_percent_away	161.0	-0.004920	9.979144e-01	-3.343468	-0.425954	0.083211	0.534928	2.534928
VWAP_CLOUD_HIGH_percent_away	161.0	0.004632	9.941548e-01	-4.238419	-0.207008	0.492549	0.614244	0.614244
VWAP_CLOUD_LOW_percent_away	161.0	-0.018531	1.020223e+00	-0.668333	-0.571711	-0.530098	0.14244	0.14244
VWAP_L1_percent_away	161.0	0.033598	1.007244e+00	-2.463562	-0.550016	-0.036018	0.560001	0.560001
VWAP_L2_percent_away	161.0	0.068150	1.024710e+00	-1.805910	-0.691588	-0.158509	0.516157	0.516157
VWAP_U1_percent_away	161.0	-0.033751	9.992960e-01	-3.827084	-0.460838	0.179575	0.614244	0.614244
VWAP_U2_percent_away	161.0	-0.051815	1.004183e+00	-4.045844	-0.473131	0.310372	0.638305	0.638305
ZIGZAG_HIGH_percent_away	161.0	0.073162	8.982327e-01	-4.632593	-0.001429	0.414480	0.45899	0.45899
ZIGZAG_LOW_percent_away	161.0	-0.063405	5.931957e-01	-0.822025	-0.336612	-0.299673	0.03953	0.03953
VOLUME_UP_percent_away	161.0	0.083313	1.660656e+00	-0.047565	-0.047565	-0.047565	-0.047565	-0.047565
CP__R6_percent_away	161.0	-0.000669	1.020631e+00	-2.499174	-0.674171	0.014235	0.810805	0.810805
CP__S6_percent_away	161.0	-0.077161	9.937800e-01	-1.455098	-0.881476	-0.319022	0.445941	2.445941
CHAIKIN_percent_away	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
BOLLI_500_UPPER_percent_away	161.0	-0.010971	9.792190e-01	-3.612127	-0.522336	0.158419	0.686	0.686
CP__S3_percent_away	161.0	-0.080173	1.012653e+00	-2.019182	-0.910201	-0.061938	0.557939	0.557939
BOLLI_500_LOWER_percent_away	161.0	-0.027122	9.547062e-01	-1.930522	-0.745580	-0.042059	0.49	0.49
14_MA_ENVELOPES_UPPER_percent_away	161.0	0.038318	9.140882e-01	-2.454637	-0.863963	0.532139		
14_MA_ENVELOPES_LOWER_percent_away	161.0	0.038327	9.140363e-01	-2.454502	-0.864895	0.531873		
14_MA_ENVELOPES_MID_percent_away	161.0	0.038305	9.140535e-01	-2.454700	-0.863995	0.532908	0	0
CP__S2_percent_away	161.0	-0.078610	1.015381e+00	-2.040837	-0.905768	-0.048792	0.558686	0.558686
VOLUME_DOWN_percent_away	161.0	0.083313	1.660656e+00	-0.047565	-0.047565	-0.047565	-0.047565	-0.047565
CP__S1_percent_away	161.0	-0.076540	1.018175e+00	-2.135086	-0.833336	-0.016894	0.557401	0.557401
CP__R5_percent_away	161.0	-0.024394	1.028781e+00	-2.759710	-0.761173	0.167312	0.769370	0.769370
CP__R4_percent_away	161.0	-0.048407	1.031246e+00	-2.775388	-0.755696	0.153103	0.661412	0.661412
CP__R1_percent_away	161.0	-0.070768	1.023575e+00	-2.393238	-0.664270	0.041792	0.539985	0.539985
CP__C_percent_away	161.0	-0.073930	1.020944e+00	-2.269003	-0.752572	-0.009869	0.552733	2.552733
CP__S5_percent_away	161.0	-0.081342	9.980795e-01	-1.704626	-0.812217	-0.251391	0.550570	2.550570
BOLLI_500_MID_percent_away	161.0	-0.019248	9.655642e-01	-2.909324	-0.632198	0.055874	0.57216	0.57216
CP__R3_percent_away	161.0	-0.062898	1.027968e+00	-2.599601	-0.540786	0.157130	0.599208	0.599208
VOLUME_percent_away	161.0	0.102016	1.659005e+00	-0.058243	-0.058243	-0.058243	-0.058243	-0.058243
CP__S4_percent_away	161.0	-0.082394	1.005521e+00	-1.915401	-0.806777	-0.171469	0.552755	0.552755
CP__R2_percent_away	161.0	-0.067072	1.025950e+00	-2.504379	-0.569731	0.113497	0.541409	0.541409
1000_SMA_binary	161.0	-0.099942	9.987799e-01	-1.006795	-1.006795	-1.006795	0.993251	0.993251
144_SMA_binary	161.0	-0.060427	1.003068e+00	-1.029789	-1.029789	-1.029789	0.971073	0.971073
14_P_MA_ENVELOPES_LOWER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
14_P_MA_ENVELOPES_MID_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
14_P_MA_ENVELOPES_UPPER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
236_EMA_binary	161.0	-0.046863	1.002761e+00	-1.015928	-1.015928	-1.015928	0.984322	0.984322
382_EMA_binary	161.0	-0.054839	1.004969e+00	-1.062924	-1.062924	0.940801	0.940801	0.940801
618_EMA_binary	161.0	-0.046930	1.005102e+00	-1.067753	-1.067753	0.936546	0.936546	0.936546
62_ZLEMA_binary	161.0	0.051383	1.002843e+00	-0.979886	-0.979886	1.020527	1.020527	1.020527
8_ZLEMA_binary	161.0	0.060427	1.003068e+00	-0.971073	-0.971073	1.029789	1.029789	1.029789
ACCUM_DIST_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
APZ_LOW_binary	161.0	0.006838	9.609567e-01	-12.110601	0.082572	0.082572	0.082572	0.082572

Loss Mitigation Analysis

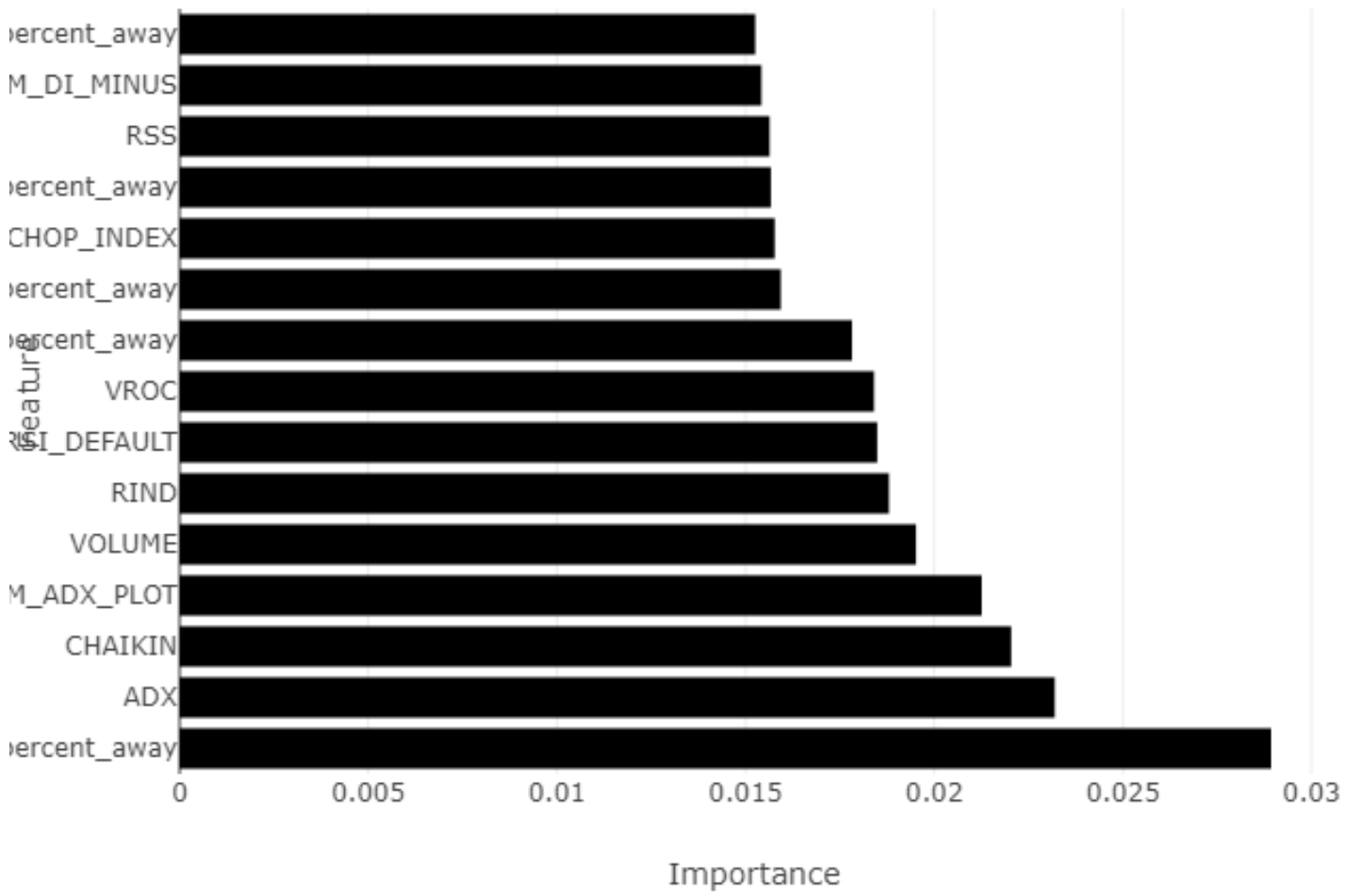
APZ_UPPER_binary	161.0	-0.106843	1.392109e-17	-0.106843	-0.106843	-0.106843	-0.106843	-0.106843
BOLLI_500_P_LOWER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
BOLLI_500_P_MID_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
BOLLI_500_P_UPPER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_C_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R1_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R2_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R3_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R4_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R5_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_R6_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S1_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S2_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S3_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S4_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S5_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CP+_S6_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
LIN_REG_binary	161.0	0.055904	1.002946e+00	-0.975470	-0.975470	1.025147	1.025147	1.025147
LIN_REG_INTERCEPT_binary	161.0	-0.036712	1.004025e+00	-1.043850	-1.043850	0.957992	0.957992	0.957992
OBV_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
VROC_binary	161.0	0.083313	1.660656e+00	-0.047565	-0.047565	-0.047565	-0.047565	21.02
VWAP_binary	161.0	-0.028866	1.001195e+00	-0.949362	-0.949362	-0.949362	1.053339	1.053339
VWAP_CLOUD_HIGH_binary	161.0	-0.046753	9.558273e-01	-0.425833	-0.425833	-0.425833	-0.425833	-0.425833
VWAP_CLOUD_LOW_binary	161.0	-0.005965	1.007665e+00	-2.022858	0.494350	0.494350	0.494350	0.494350
VWAP_L1_binary	161.0	-0.000390	1.003268e+00	-1.448414	-1.448414	0.690411	0.690411	0.690411
VWAP_L2_binary	161.0	0.055931	9.323624e-01	-2.742122	0.364681	0.364681	0.364681	0.364681
VWAP_U1_binary	161.0	-0.039410	9.839893e-01	-0.640959	-0.640959	-0.640959	1.560163	1.560163
VWAP_U2_binary	161.0	-0.027847	9.651728e-01	-0.336252	-0.336252	-0.336252	-0.336252	2.9
ZIGZAG_HIGH_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
ZIGZAG_LOW_binary	161.0	0.047565	0.000000e+00	0.047565	0.047565	0.047565	0.047565	0.047565
14_MA_ENVELOPES_LOWER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
14_MA_ENVELOPES_MID_binary	161.0	0.055904	1.002946e+00	-0.975470	-0.975470	1.025147	1.025147	1.025147
14_MA_ENVELOPES_UPPER_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
VOLUME_DOWN_binary	161.0	0.083313	1.660656e+00	-0.047565	-0.047565	-0.047565	-0.047565	-0.047565
CP__S1_binary	161.0	-0.114248	1.010358e+00	-1.127739	-1.127739	0.886730	0.886730	0.886730
BOLLI_500_MID_binary	161.0	-0.001659	1.003235e+00	-1.072607	-1.072607	0.932308	0.932308	0.932308
BOLLI_500_UPPER_binary	161.0	-0.067480	9.820797e-01	-0.762983	-0.762983	-0.762983	1.310645	1.310645
CP__C_binary	161.0	-0.121489	9.915214e-01	-0.966694	-0.966694	-0.966694	1.034453	1.034453
VOLUME_binary	161.0	0.117956	1.657334e+00	-0.067344	-0.067344	-0.067344	-0.067344	14.8
CP__R4_binary	161.0	-0.015111	9.776353e-01	-0.279032	-0.279032	-0.279032	-0.279032	3.58
CP__R5_binary	161.0	-0.088970	5.918357e-01	-0.135613	-0.135613	-0.135613	-0.135613	7.37
BOLLI_500_LOWER_binary	161.0	-0.048119	1.021979e+00	-1.502449	-1.502449	0.665580	0.665580	0.665580
CP__S5_binary	161.0	-0.052497	1.080908e+00	-3.414256	0.292890	0.292890	0.292890	0.292890
CP__S2_binary	161.0	-0.056564	1.016676e+00	-1.304308	-1.304308	0.766690	0.766690	0.766690
CP__R3_binary	161.0	-0.054115	9.644463e-01	-0.532971	-0.532971	-0.532971	-0.532971	1.87
CP__S6_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
CHAIKIN_binary	161.0	0.000000	0.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000
VOLUME_UP_binary	161.0	0.083313	1.660656e+00	-0.047565	-0.047565	-0.047565	-0.047565	2
CP__R2_binary	161.0	-0.056245	9.734355e-01	-0.623470	-0.623470	-0.623470	1.603927	1.603927
CP__R6_binary	161.0	-0.047565	6.960544e-18	-0.047565	-0.047565	-0.047565	-0.047565	-0.047565
CP__S4_binary	161.0	-0.057982	1.038093e+00	-1.828425	-1.828425	0.546919	0.546919	0.546919
CP__S3_binary	161.0	-0.043715	1.018186e+00	-1.433587	-1.433587	0.697551	0.697551	0.697551
CP__R1_binary	161.0	-0.058451	9.887135e-01	-0.808075	-0.808075	-0.808075	1.237509	1.237509



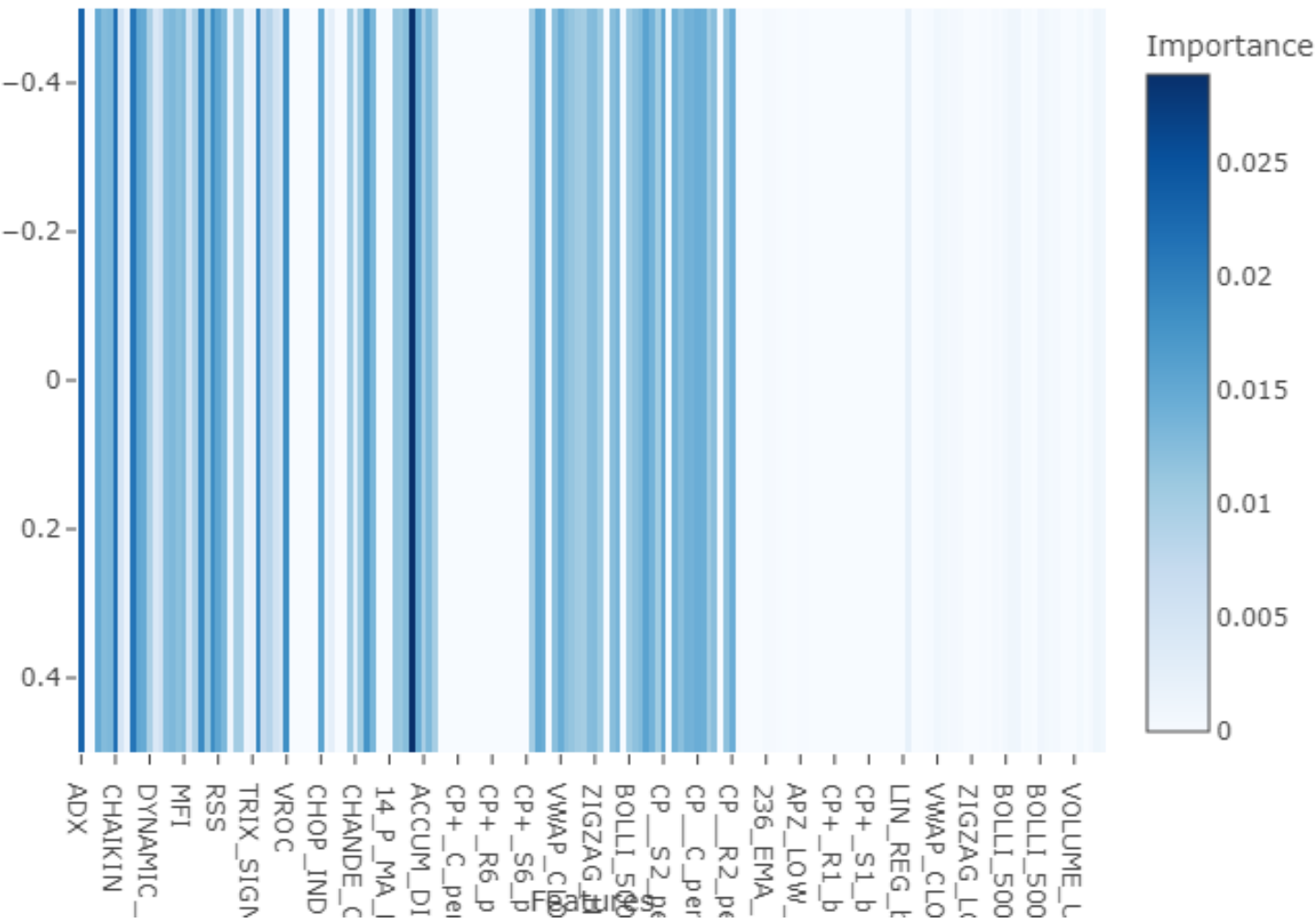
Confusion Matrix



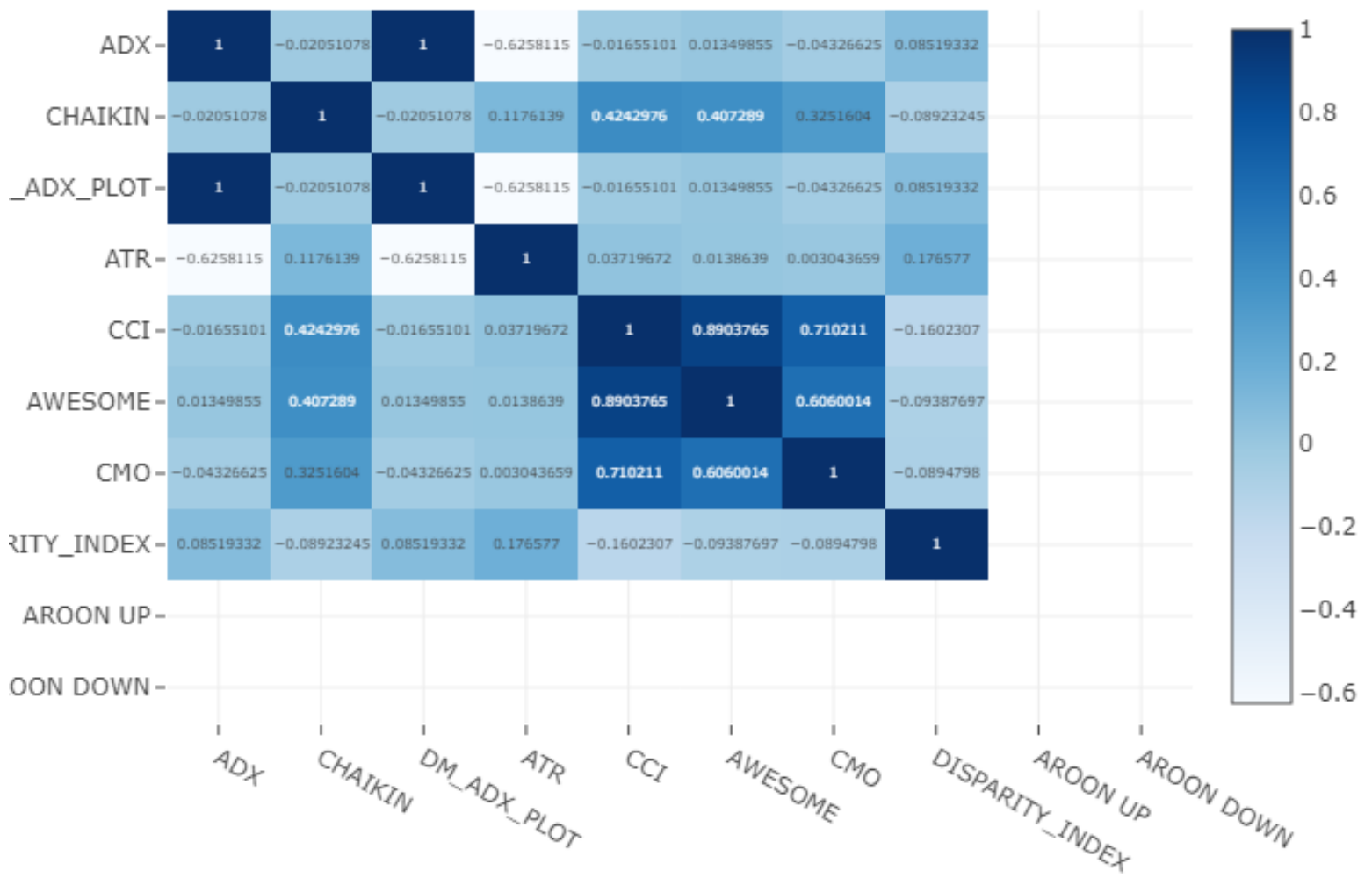
Feature Importance



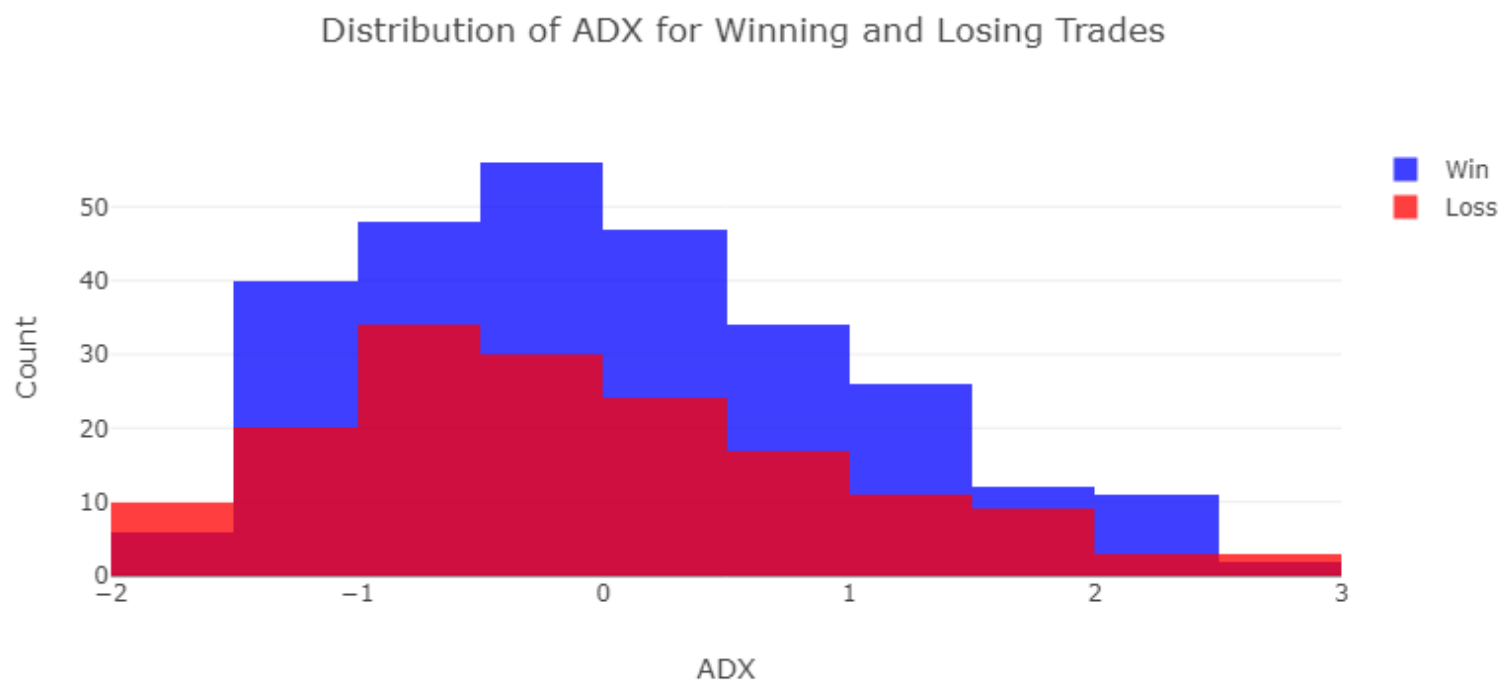
Feature Importance Heatmap



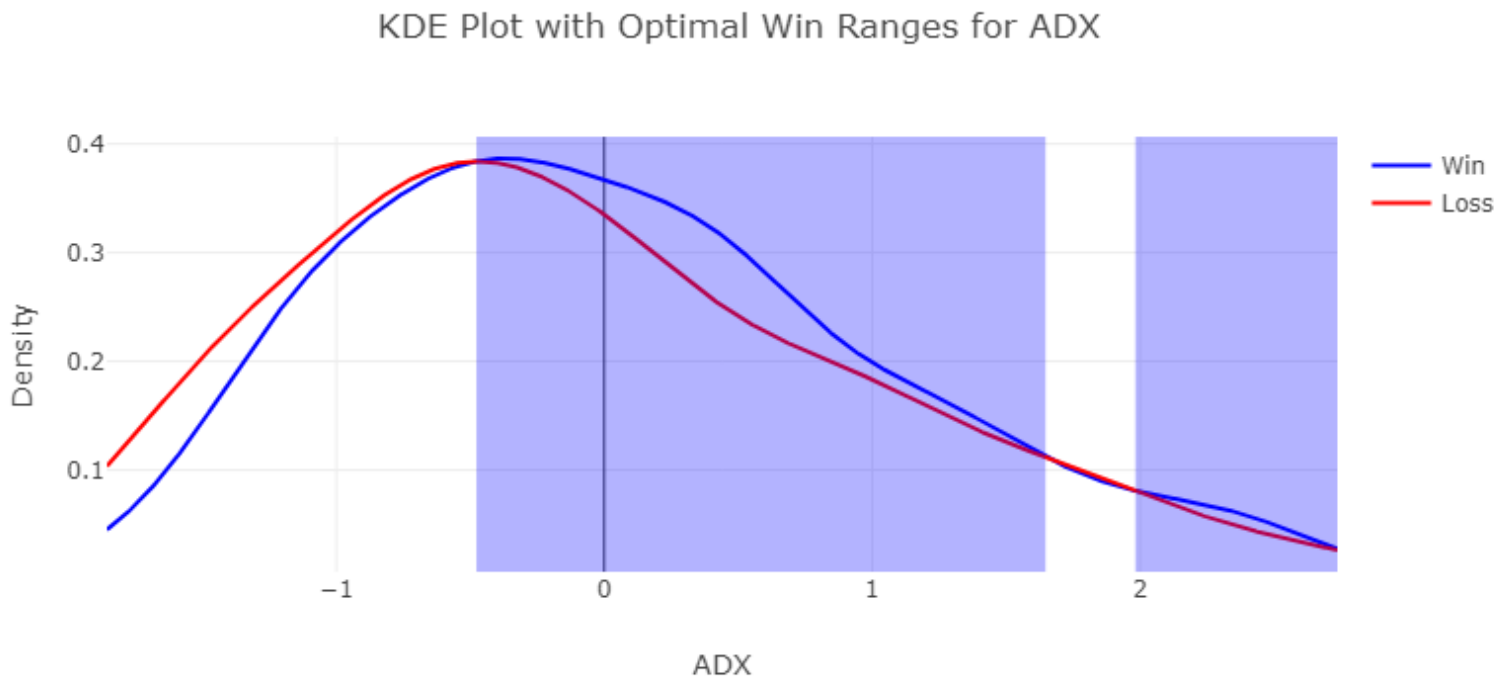
## Correlation Matrix of Top Indicators



Distribution of ADX for Winning and Losing Trades



KDE Plot with Optimal Win Ranges for ADX



Mean Indicator Values for Losses

