Classification Report precision recall f1-score support 0.73 0.26 0.67 0.35 0.81 0.20 59 30 0 1 accuracy macro avg weighted avg 0.61 89 0.49 89 0.51 0.51 0.56 0.61 0.57 89 Accuracy Accuracy: 0.6067415730337079

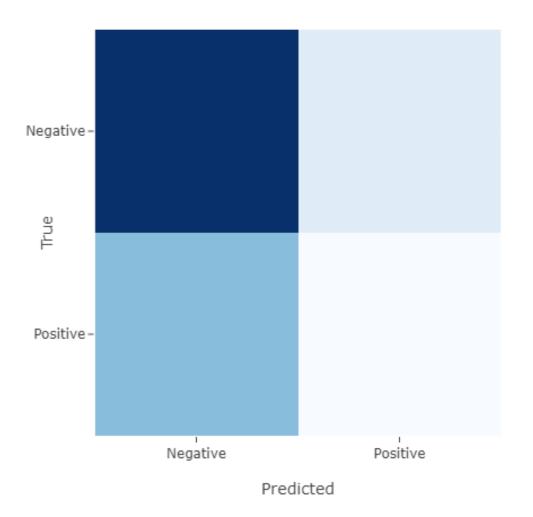
Optimal Win Ranges Summary for Long Trades feature trade_type optimal_win_range_start optimal_win_range_end				
•	feature trade_type optimal_	win_range_start optin	nal_win_range_end	
0	LIN_REG_INTERCEPT_binary L	E -1.043850	-0.869515	
1	LIN_REG_INTERCEPT_binary L	E 0.591288	0.957992	
2	VWAP_CLOUD_LOW_binary L	.E -2.022858	-1.687734	
3		.E 0.038279	0.494350	
4	VWAP_CLOUD_HIGH_binary L	.E -0.425833	-0.231446	
5	VWAP_CLOUD_HIGH_binary L	.E 1.504148	2.348341	
6	BOLLI_500_LOWER_binary LE	-1.502449	-1.127005	
7	BOLLI_500_LOWER_binary LE	0.196817	0.665580	
8	1000_SMA_binary LE	-0.426201	0.993251	
9	VWAP_L1_binary LE	-1.448414	-0.949569	
10	VWAP_L1_binary LE	0.544825	0.690411	
11	BOLLI_500_MID_binary LE	-1.072607	-0.761534	
12	VWAP_L2_binary LE	-2.742122	-1.078318	
13	CP_S5_binary LE	-3.414256	-3.135942	
14	CPS5_binary LE	-0.215498	0.292890	

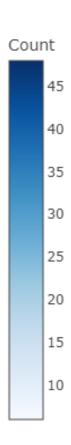
Optimal Win Ranges Summary for Short Trades feature trade_type optimal_win_range_start optimal_win_range_end				
•	feature trade_type optim	al_win	_range_start optim	al_win_range_end
0	LIN_REG_INTERCEPT_binary	SE	0.104354	0.957992
1	VWAP_CLOUD_LOW_binary	SE	-2.022858	-1.549149
2	VWAP_CLOUD_LOW_binary	SE	0.171825	0.494350
3	VWAP_CLOUD_HIGH_binary	SE	-0.425833	-0.089822
4	VWAP_CLOUD_HIGH_binary	SE	1.640219	2.348341
5	1000_SMA_binary ŚE		-1.006795	-0.838623
6	1000_SMA_binary SE		0.630880	0.993251
7	VWAP_L1_binary SE		-1.448414	0.566235
8	BOLLI_500_MID_binary SE		-1.072607	0.605180
9	VWAP_L2_binary SE		-2.742122	0.361571
10		SE	-0.762983	-0.561640
11		SE	0.893429	1.310645
12	CP S5 binary SE		0.014575	0.292890

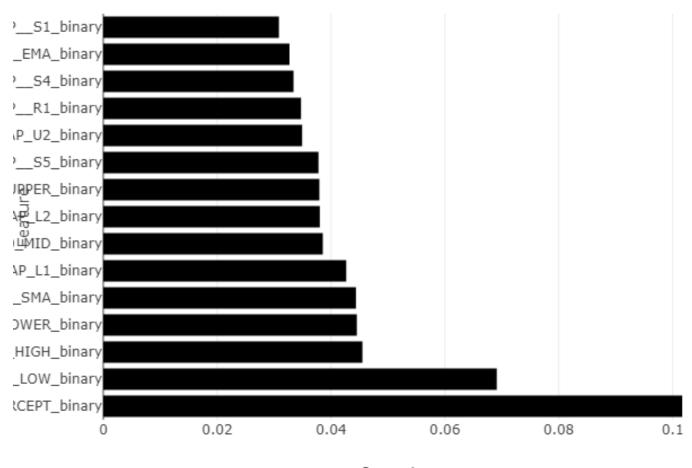
Optimal Win Ranges Summary for Both Long and Short Trades feature trade_type optimal_win_range_start optimal_win_range_end				
feature trade_type optimal_	win_range_start opti	mal_win_range_end		
0 LIN_REG_INTERCEPT_binary	-1.043850	-0.807396		
1 LIN_REG_INTERCEPT_binary	0.541192	0.957992		
2 VWAP_CLOUD_LOW_binary	-2.022858	-1.710412		
3 VWAP_CLOUD_LOW_binary	0.146628	0.494350		
4 VWAP_CLOUD_HIGH_binary	-0.425833	-0.264769		
5 VWAP_CLOUD_HIGH_binary	1.562464	2.348341		
6 BOLLI_500_LOWER_binary	-1.502449	-1.341854		
7 BOLLI_500_LOWER_binary	0.266263	0.665580		
8 1000_SMA_binary	0.462708	0.993251		
9 VWAP_L1_binary	-1.448414	-1.108000		
10 VWAP_L1_binary	0.347856	0.690411		
11 BOLLI 500 MID binary	-1.072607	-0.735444		
12 BOLLI_500_MID_binary	0.587118	0.932308		
13 VWAP_L2_binary	-2.742122	-1.252473		
14 BOLLI 500 UPPER binary	-0.762983	-0.704863		
15 BOLLI 500 UPPER binary	0.750205	1.310645		
16 CPS5_binary	-0.067063	0.292890		
-				

BOLLI 500 P_UPPER_binary	Logo Mitigation Analysis	
1000_SMA_binary 14_SMA_binary 14_SMA_binary 14_P_MA_ENVELOPES_LOWER_binary 161.0_0.000000_0.0000000_0.0000000_0.000000	LUSS WIILIGATION ANALYSIS	mean std min 25% 50% 75% max
14_P_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.0000000+00 0.000000 0.000000 0.000000 0.000000 1.4_P_MA_ENVELOPES_UPPER_binary 161.0 0.000000 0.000000+00 0.000000 0.000000 0.000000 0.000000 0.000000	1000 SMA binary	161.0 -0.099942 9.987799e-01 -1.006795 -1.006795 -1.006795 0.993251 0.993
14_P_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.0000000+00 0.000000 0.000000 0.000000 0.000000 0.14_P_MA_ENVELOPES_UPPER_binary 161.0 0.000000 0.000000+00 0.000000 0.000000 0.000000 0.000000 0.000000	144 SMA binary	161.0 -0.060427 1.003068e+00 -1.029789 -1.029789 -1.029789 0.971073 0.971
14_P_MA_ENVELOPES_MID_binary 161.0_0.000000_0.000000+00_0.000000_0.000000_0.000000_0.000000_0.000000	14 P MA ENVELOPES	LOWER binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000
14.P MA. ENVELOPES. UPPER. binary 161.0 .0.000000 .0.0000000 +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 0.000
236 EMA binary	AA D MA ENIVELODEC	LIDDED binom, 464 0 0 000000 0 0000000, 00 0 000000 0 000000
BOLLI_SOD_P_LOWER_binary	236 EMA binary	161.0 -0.046863 1.002761e+00 -1.015928 -1.015928 -1.015928 0.984322 0.984
BOLLI_SOD_P_LOWER_binary	382 EMA binary	161.0 -0.054839 1.004969e+00 -1.062924 -1.062924 0.940801 0.940801 0.940
BOLLI_SOD_P_LOWER_binary	618 EMA binary	161.0 -0.046930 1.005102e+00 -1.067753 -1.067753 0.936546 0.936546 0.936
BOLLI_SOD_P_LOWER_binary	62 ZLEMA bináry	161.0 0.051383 1.002843e+00 -0.979886 -0.979886 1.020527 1.020527 1.020
BOLLI_SOD_P_LOWER_binary	8_ZLEMA_binary	161.0 0.060427 1.003068e+00 -0.971073 -0.971073 1.029789 1.029789 1.029
BOLLI_SOD_P_LOWER_binary	ACCUM_DIST_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00
BOLLI_SOD_P_LOWER_binary	APZ_LOW_binary	161.0 0.006838 9.609567e-01 -12.110601 0.082572 0.082572 0.082572 0.082
BOLLL 500 P_ MID_binary	ALZ_ULLEN_DILIALY	101.0 -0.100043 1.3321036-17 -0.100043 -0.100043 -0.100043 -0.100043
BOLLI 500 P_UPPER_binary	BOLLI_500_P_LOWER_I	pinary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000
CP+ C binary		
CP+S3_binary	BOLLI_500_P_UPPER_b	inary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000
CP+S3_binary	CP+_C_binary	161.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+S3_binary	CP+_K I_DINARY	$101.0 \ 0.000000 \ 0.0000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.00000000$
CP+S3_binary	CP+_R2_Dilidiy	$101.0 \ 0.000000 \ 0.000000000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.0000000 \ 0.00000000$
CP+S3_binary	CP+ R4 hinary	161.0 0.000000 0.0000006 \pm 00 0.000000 0.000000 0.000000 0.000000 0.000000
CP+S3_binary	CP+ R5 hinary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000
CP+S3_binary	CP+ R6 binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000
CP+S3_binary	CP+ S1 binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000
CP+_S3_binary	CP+ S2 binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00000
CP+_S4_binary	CP+ S3 binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00000
LIN_REG_INTERCEPT_binary	CP+_S4_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00000
LIN_REG_binary 161.0 0.055904 1.002946e+00 -0.975470 -0.975470 1.025147 1.025147 1.02514 161.0 -0.036712 1.004025e+00 -1.043850 -1.043850 0.957992 0.957992 08V_binary 161.0 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 0.00000
LIN_REG_binary 161.0 0.055904 1.002946e+00 -0.975470 -0.975470 1.025147 1.025147 1.02514 161.0 -0.036712 1.004025e+00 -1.043850 -1.043850 0.957992 0.957992 08V_binary 161.0 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 0.00000
OBV_binary	LIN_REG_binary	161.0 0.055904 1.002946e+00 -0.975470 -0.975470 1.025147 1.025147 1.025
VWAP_CLOUD_HIGH_binary	LIN_REG_INTERCEPT_I	binary 161.0 -0.036/12 1.004025e+00 -1.043850 -1.043850 0.95/992 0.95/992
VWAP_CLOUD_HIGH_binary	OBV_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000
VWAP_CLOUD_HIGH_binary	VROC_binary	101.0 0.083313 1.0000500+00 -0.047505 -0.047505 -0.047505 -0.047505 21.0237
VWAP_L1_binary	VWAP CLOUD HIGH K	.000.1 9630.1 20049.0- 200949.0- 0.949302 -0.949302 -1.00030 1.0011906+100 -0.1010 928232 1 161 0 -0 16253 1 161 0 - 162533 1 1626373 0 16353 1 16353 1 16353 1 16353 1 16353 1 16353 1 16353 1
VWAP_L1_binary		aan, 161
14_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	VWAP I1 hinary	161 0 -0 000390 1 003268e+00 -1 448414 -1 448414 0 690411 0 690411 0 690
14_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	VWAP L2 binary	161.0 0.055931 9.323624e-01 -2.742122 0.364681 0.364681 0.364681 0.364
14_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	VWAP U1 binary	161.0 -0.039410 9.839893e-01 -0.640959 -0.640959 -0.640959 1.560163 1.560
14_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	VWAP U2 binary	161.0 -0.027847 9.651728e-01 -0.336252 -0.336252 -0.336252 -0.336252 2.973
14_MA_ENVELOPES_LOWER_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	ZIGZAG_HIGH_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00
14_MA_ENVELOPES_MID_binary	ZIGZAG_LOW_billary	101.0 0.047505 0.00000000+00 0.047505 0.047505 0.047505 0.047505 0.0
14_MA_ENVELOPES_UPPER_binary 161.0 0.000000 0.000000e+00 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 21 CPS1_binary 161.0 -0.114248 1.010358e+00 -1.127739 -1.127739 0.886730 0.886730 0.88673 BOLLI_500_MID_binary 161.0 -0.001659 1.003235e+00 -1.072607 -1.072607 0.932308 0.932308 0.93 BOLLI_500_UPPER_binary 161.0 -0.067480 9.820797e-01 -0.762983 -0.762983 -0.762983 1.310645 1. CPC_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 14.8493 CPR4_binary 161.0 -0.015111 9.776353e-01 -0.279032 -0.279032 -0.279032 -0.279032 3.58381 CPR5_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.66		
VOLUME_DOWN_binary CPS1_binary BOLLI_500_MID_binary BOLLI_500_UPPER_binary BOLLI_500_LOWER_binary BOLLI_500_LOWE		
CPS1_binary		
BOLLI_500_MID_binary BOLLI_500_UPPER_binary B	VOLUME_DOWN_binary	161.0 0.083313 1.66065600 -0.047565 -0.047565 -0.047565 -0.047565 -0.047565 -0.047565
BOLLI_500_UPPER_binary	BOLL 500 MID bings	1010-0.114240 061006.0 061121.1- 061121.1- 00+9066010.1 04411.0-0.110-0.110-0.10-0.00
CPC_binary VOLUME_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 14.8493 CPR4_binary 161.0 -0.015111 9.776353e-01 -0.279032 -0.279032 -0.279032 -0.279032 3.58381 CPR5_binary 161.0 -0.088970 5.918357e-01 -0.135613 -0.135613 -0.135613 7.37394 BOLLI_500_LOWER_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580 0 CPS5_binary 161.0 -0.052497 1.080908e+00 -3.414256 0.292890 0.292890 0.292890 CPS2_binary 161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000	BOLLI_300_IVIID_DITIATY	.0 .0.332300
BOLLI_500_LOWER_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580 0 CPS5_binary 161.0 -0.052497 1.080908e+00 -3.414256 0.292890 0.292890 0.292890 0.292890 CPS2_binary 161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000	CP C hinary	161.0 -0.007-00 3.0207376-01 -0.702303 -0.702303 -0.702303 1.310043 1.310043
BOLLI_500_LOWER_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580 0 CPS5_binary 161.0 -0.052497 1.080908e+00 -3.414256 0.292890 0.292890 0.292890 0.292890 CPS2_binary 161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000	VOLUME binary	161.0 0.117956 1.657334e+00 -0.067344 -0.067344 -0.067344 -0.067344 14 84
BOLLI_500_LOWER_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580 0 CPS5_binary 161.0 -0.052497 1.080908e+00 -3.414256 0.292890 0.292890 0.292890 0.292890 CPS2_binary 161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000	CP R4 binary	161.0 -0.015111 9.776353e-01 -0.279032 -0.279032 -0.279032 -0.279032 3.5838
BOLLI_500_LÓWER_binary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580 0 CPS5_binary 161.0 -0.052497 1.080908e+00 -3.414256 0.292890 0.292890 0.292890 0.292890 CPS2_binary 161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 0.766690 CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000	CPR5_binary	161.0 -0.088970 5.918357e-01 -0.135613 -0.135613 -0.135613 -0.135613 7.3739
CPS5_binary	BOLLI_500_LÓWER_bin	ary 161.0 -0.048119 1.021979e+00 -1.502449 -1.502449 0.665580 0.665580
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 1.87627 CP_S6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	CP S5 binary	161 0 -0 052497 1 080908e+00 -3 414256 0 292890 0 292890 0 292890 0 2928
CPR3_binary 161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 -0.532971 1.87627 CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 CHAIKIN_binary 161.0 0.000000 0.00000e+00 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 21.02 CPR2_binary 161.0 -0.056245 9.734355e-01 -0.623470 -0.623470 -0.623470 1.603927 1.60392 CPS4_binary 161.0 -0.057982 1.038093e+00 -1.828425 -1.828425 0.546919 0.546919 0.546919	CPS2_binary	161.0 -0.056564 1.016676e+00 -1.304308 -1.304308 0.766690 0.766690 0.7666
CPS6_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	CPR3_binary	161.0 -0.054115 9.644463e-01 -0.532971 -0.532971 -0.532971 -0.532971 1.8762
VOLUME_UP_binary 161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.000000 0.000000	CPS6_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00000
VOLUME_UP_binary 161.0 0.083313 1.660656e+00 -0.047565 -0.047565 -0.047565 -0.047565 21.02	CHAIKIN_binary	161.0 0.000000 0.000000e+00 0.000000 0.000000 0.000000 0.00000
CPK2_binary	VOLUME_UP_binary	161.0 0.083313 1.660656e+00 -0.047565 -0.047565 -0.047565 -0.047565 21.
CPKo_binary	CPKZ_binary	101.0 -0.056245 9.7343556-01 -0.623470 -0.623470 -0.623470 1.603927 1.6039
CF34_Diliary	CPKo_DINARY	101.0-0.047505 0.9005446-18 -0.047505
<u> </u>	GFS4_Dinary	101.0-0.037302 1.0300338+00 -1.020423 -1.020423 0.340313 0.340319 0.5408

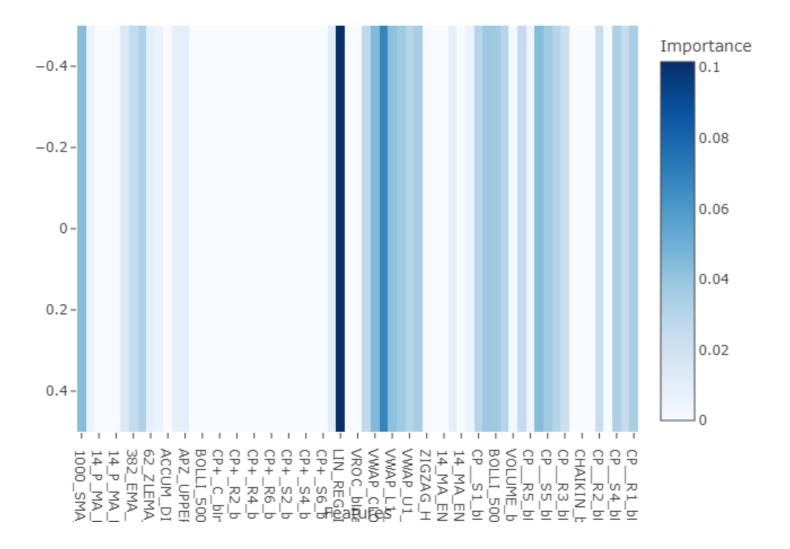
Loss Mitigation Analysis CP__S3_binary CP__R1_binary

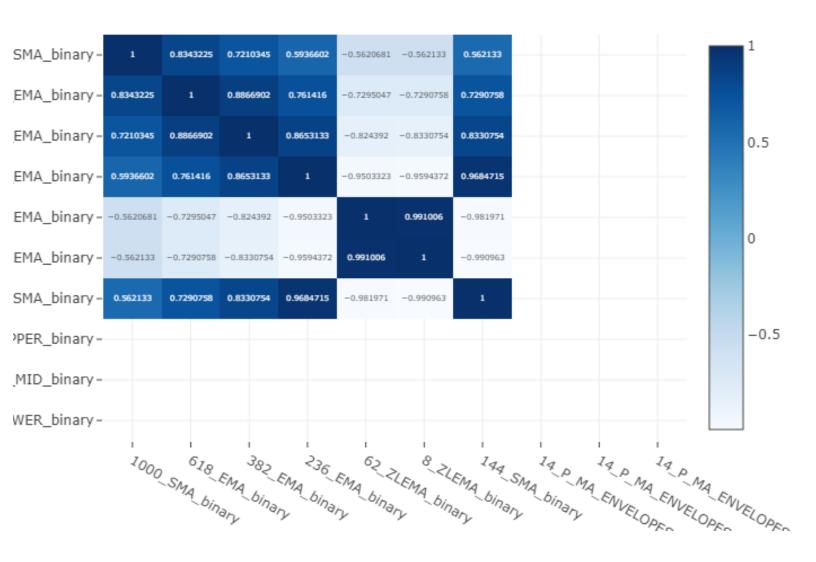




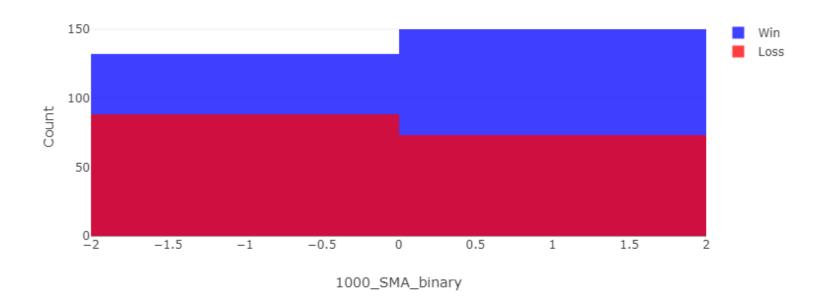


Importance

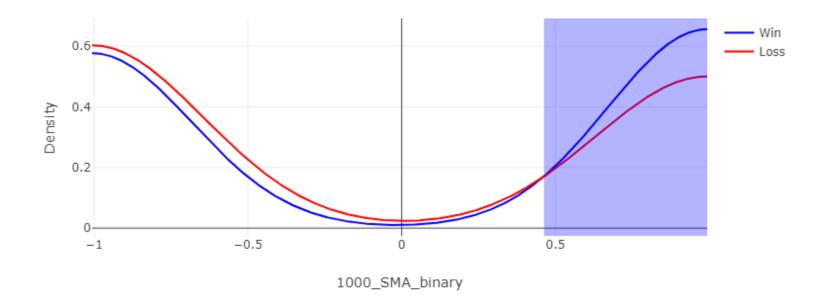




Distribution of 1000_SMA_binary for Winning and Losing Trades



KDE Plot with Optimal Win Ranges for 1000_SMA_binary



Mean Indicator Values for Losses

