	hiperparametros	features	cantidad de datos	auc	kaggle
gradient boosting	(criterion= 'friedman_mse', learning_rate= 0.05, loss= 'deviance', max_depth = 3, max_features= 'log2', min_samples_leaf = 0.13636363636363638, min_samples_split=0.1, n_estimators= 10, subsample= 0.95)	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'event_lead', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'otros',	980 negativos y 980 postivos	0,8796313	0,8046
gradient boosting	(criterion= 'mae', learning_rate= 0.05, loss= 'deviance', max_depth = 3, max_features= 'log2', min_samples_leaf = 0.13636363636363638, min_samples_split=0.42727272727272736, n_estimators= 10, subsample= 0.9)	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'event_lead', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'otros','Partes del dia	980 negativos y 980 postivos	0,8561329966	0,80181
gradient boosting	criterion= 'mae', learning_rate= 0.1, loss= 'deviance', max_depth = 3, max_features= 'sqrt', min_samples_leaf = 0.1, min_samples_split= 0.2090909090909091, n_estimators= 10, subsample= 1.0	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'event_lead', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'otros', 'marca_apple', 'marca_motorola', 'marca_samsung', 'condition_Bom', 'condition_Bom - Sem Touch ID', 'condition_Excelente', 'condition_Muito Bom',	980 negativos y 980 postivos	0,8754914469	0,80975
Random forest	bootstrap= False, max_depth= 10, max_features = 'sqrt', min_samples_leaf= 2, min_samples_split= 2, n_estimators= 555	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'marca_apple', 'marca_motorola', 'marca_samsung	980 negativos y 980 positivos	0,860000	0,8185
Random forest	bootstrap= False, max_depth= 10, max_features = 'sqrt', min_samples_leaf= 2, min_samples_split= 2, n_estimators= 555	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'marca_apple', 'marca_motorola', 'marca_samsung', 'condition_Bom', 'condition_Bom - Sem Touch ID', 'condition_Excelente', 'condition_Muito Bom'		0,875790871456	0,82779
Random forest	bootstrap= True, max_depth= None, max_features = 'auto', min_samples_leaf=4, min_samples_split= 2, n_estimators= 288	cant_seciones', 'event_checkout', 'event_conversion', 'event_ad campaign hit', 'skus', 'Busca_terminos_populares', 'Computer', 'Smartphone', 'marca_apple', 'marca_motorola', 'marca_samsung', 'condition_Bom', 'condition_Bom - Sem Touch ID', 'condition_Excelente', 'condition_Muito Bom', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse'		0,8800479	0,82779000
gradient boosting	clf = GradientBoostingClassifier(criterion= 'mae', learning_rate= 0.1, loss= 'deviance', max_depth = 3, max_features= 'sqrt', min_samples_leaf = 0.1, min_samples_split= 0.2090909090909091, n_estimators= 10, subsample= 1.0)	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'Smartphone', 'ventas_region'		0,8831723	0,80062000
Random forest	bootstrap= True, max_depth= 10, max_features = 'auto', min_samples_leaf=4, min_samples_split= 5, n_estimators= 1000	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'Smartphone', 'ventas_region'		0,88582	0,8294
MPLclassifier	activation= 'logistic', alpha= 0.001, solver= 'lbfgs',hidden_layer_sizes= (41, 16))	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'Smartphone', 'ventas_region'		0,8900	0,83716
XGBoosting	colsample_bylevel= 0.2, colsample_bytree= 0.8, gamma = 0.3, learning_rate = 0.025, max_depth = 8, min_child_weight = 7, n_estimators = 200, silent = True	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'Smartphone', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region', 'count_activity', 'conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday', 'new_15lastdays'		0,89158226	0,84229
gradient boosting	subsample': 1.0,	event_checkout','Computer',"event_conversion','ventas_region'		0.8753482438097222	0.79035
	n_estimators': 10,				
	min_samples_split': 0.2090909090909091,				
	min_samples_leaf': 0.1,				
	max_features': 'sqrt',				
	max_depth': 3,				
	loss': 'deviance',				

	learning_rate': 0.1,			
	criterion': 'mae'			
gradient boosting	GradientBoostingClassifier(criterion= 'mae',	idem sin normalizar	0.868409404535	0.80624
	learning_rate= 0.075,			
	loss= 'deviance',			
	max_depth = 5,			
	max_features= 'log2',			
	min_samples_leaf = 0.13636363636363638,			
	min_samples_split= 0.13636363636363638,			
	n_estimators= 10,			
	subsample= 0.95)			
Decision Tree	default	idem	0.8031280773909510	0.75570
				0.8499434
xgboost	clf =XGBClassifier(	Index(['cant_seciones', 'event_checkout', 'event_conversion', 'Computer',	88.787.200.249.9	
	colsample_bylevel= 0.6,	Smartphone', 'marca_apple', 'marca_samsung', 'campaign_source_google',		
	colsample_bytree= 0.6,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',		
	gamma = 0.8,	count_activity', 'conversiones_15lastdays', 'checkout_15lastdays',		
	learning_rate = 0.05,	viewed_15lastday', 'new_15lastdays', 'sku',		
	max_depth = 2,	cantidad_De_Compras_De_Mismo_Sku'],		
	min_child_weight = 4,			
	n_estimators = 700,			
	silent = True			
	)			
random forest	clf = RandomForestClassifier(bootstrap= True,	Index(['cant_seciones', 'event_checkout', 'event_conversion',	89.442.028.796.8	86.254
	max_depth= 10,	Busca_terminos_populares', 'Computer', 'Smartphone', 'count_activity',		
	max_features = 'auto',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',		
	min_samples_leaf=4,	new_15lastdays', 'sku', 'cantidad_De_Compras_De_Mismo_Sku',		
	min_samples_split= 5,	search_and_purchase', 'cantidadDeStaticPage', 'label'],		
	n_estimators= 1000)	dtype='object')		
mean		los mismos que el anterior		
			89,6	86,4
Redes neuronales		mismos features	0,91	0,5
Mean	Hiper parametros de xgboost	Index(['cant_seciones', 'event_checkout', 'event_conversion',	88.457.833.207.4	86,1
	{'silent': True,	screen_resolution_A', 'screen_resolution_B', 'screen_resolution_C',		
	n_estimators': 150,	Busca_terminos_populares', 'Computer', 'Smartphone', 'ventas_region',		
	min_child_weight': 6,	count_activity', 'conversiones_15lastdays', 'checkout_15lastdays',		
	max_depth': 2,	viewed_15lastday', 'color_Preto', 'color_Dourado', 'color_Branco',		
	learning_rate': 0.15,	color_Cinza espacial', 'new_15lastdays', 'sku',		
	gamma': 0.8,	cantidad_De_Compras_De_Mismo_Sku', 'search_and_purchase',		
	colsample_bytree': 0.2,	cantidadDeStaticPage', 'label'],		
	colsample_bylevel': 0.8}	dtype='object')		
Xgboost	clf =XGBClassifier(colsample_bylevel= 0.6, colsample_bytree= 0.6, gamma = 0.5, learning_rate = 0.075, max_depth = 3, min_child_weight = 5, n_estimators = 50, silent =True, subsample = 0.8	['cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'ventas_region', 'count_activity', 'checkout_15lastdays', 'viewed_15lastday', 'checkout_lastmonth', 'label', 'prob_marca', 'prob_model', 'prob_marca_checkout'	0,8866482672	0,85803
Random Forest	{'n_estimators': 641, 'min_samples_split': 10, 'min_samples_leaf': 1, 'max_features': 'sqrt', 'max_depth': 43, 'bootstrap': True}	Index(['skus', 'Busca_terminos_populares', 'Computer', 'checkout_15lastdays', 'viewed_15lastdays', 'new_15lastdays', 'sku', 'cantidad_De_Compras_De_Mismo_Sku', 'label', 'prob_marca', 'prob_model', 'prob_marca_checkout', 'prob_marca_en_base_checkout', 'prob_model_en_base_checkout'], dtype='object')	88.762.465.175.6	85.791
Random Forest	{'n_estimators': 917, 'min_samples_split': 10, 'min_samples_leaf': 4, 'max_features': 'auto', 'max_depth': 93, 'bootstrap': True}	Index(['skus', 'Busca_terminos_populares', 'Computer', 'conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday', 'color_Cinza espacial', 'new_15lastdays', 'sku', 'cantidad_De_Compras_De_Mismo_Sku', 'label', 'prob_marca', 'prob_model', 'prob_marca_checkout', 'prob_marca_en_base_checkout', 'prob_model_en_base_checkout'], dtype='object')	88.899.159.007.4	85.397
Xgboost	{'subsample': 0.5,	Index(['skus', 'Busca_terminos_populares', 'Computer',	87.527.013.304.8	85.117
	silent': False,	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',		
	n_estimators': 50,	color_Cinza espacial', 'new_15lastdays', 'sku',		
	min_child_weight': 5,	cantidad_De_Compras_De_Mismo_Sku', 'label', 'prob_marca', 'prob_model',		

	max_depth': 9,	prob_marca_checkout', 'prob_marca_en_base_checkout',					
	learning_rate': 0.15,	prob_model_en_base_checkout'],					
	gamma': 0.9,	dtype='object')					
	colsample_bytree': 0.2,						
	colsample_bylevel': 0.8}						
Mean de los anteriores					85.559		
Xgboost	{'silent': False,	Los mismos pero con oversampling		0.95	0.81		
	n_estimators': 750,						
	min_child_weight': 2,						
	max_depth': 11,						
	learning_rate': 0.2,						
	gamma': 0.0,						
	colsample_bytree': 0.8,						
	colsample_bylevel': 0.8}						
Random Forest	{'n_estimators': 724,	['skus', 'screen_resolution', 'Busca_terminos_populares', 'Computer',					
	min_samples_split': 2,	Smartphone', 'conversiones_15lastdays', 'checkout_15lastdays',					
	min_samples_leaf': 1,	viewed_15lastday', 'color_Cinza espacial', 'new_15lastdays', 'sku',					
	max_features': 'sqrt',	cantidad_De_Compras_De_Mismo_Sku', 'prob_marca', 'prob_model',					
	max_depth': 43,	prob_marca_checkout', 'prob_marca_en_base_checkout',					
	bootstrap': True}	prob_model_en_base_checkout', 'compraPopular', 'usuario_Checkeador',					
		usuario_susceptible_campaign', 'usuario_buscador',					
		usuario_dubitativo'],					
		dtype='object') pero con Oversampling					
xgboost	{'subsample': 0.5,	Index(['skus', 'Busca_terminos_populares', 'Computer',		0.89	0.82		
	silent': False,	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',					
	n_estimators': 50,	color_Cinza espacial', 'new_15lastdays', 'sku',					
	min_child_weight': 5,	cantidad_De_Compras_De_Mismo_Sku', 'label', 'prob_marca', 'prob_model',					
	max_depth': 9,	prob_marca_checkout', 'prob_marca_en_base_checkout',					
	learning_rate': 0.15,	prob_model_en_base_checkout'],					
	gamma': 0.9,	dtype='object')					
	colsample_bytree': 0.2,						
	colsample_bylevel': 0.8}						
random forest	{'n_estimators': 310,			8.914	86,2		
	min_samples_split': 10,	Index(['event_checkout', 'event_conversion', 'Computer', 'Smartphone', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region', 'count_activity', 'conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday', 'new_15lastdays'], dtype='object')					
	min_samples_leaf': 4,						
	max_features': 'auto',						
	max_depth': 76,						
	bootstrap': True}						
random forest	{'n_estimators': 558,	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini',		89,4	86,22		
	min_samples_split': 10,	max_depth=76, max_features='sqrt', max_leaf_nodes=None,					
	min_samples_leaf': 4,	min_impurity_decrease=0.0, min_impurity_split=None,					
	max_features': 'sqrt',	min_samples_leaf=4, min_samples_split=10,					
	max_depth': 76,	min_weight_fraction_leaf=0.0, n_estimators=558, n_jobs=None,					
	bootstrap': True}	oob_score=False, random_state=None, verbose=0,					
		warm_start=False)					
mean con xgboost	{'silent': True,	mismos features			86.179		
	n_estimators': 100,						
	min_child_weight': 7,						
	max_depth': 5,						
	learning_rate': 0.15,						
	gamma': 0.9,						
	colsample_bytree': 0.6,						
	colsample_bylevel': 0.2}			8.960.606.139.50	85.836		
random forest	{'n_estimators': 724,	Index(['cant_seciones', 'event_checkout', 'event_conversion', 'skus',					
	min_samples_split': 10,	Computer', 'Smartphone', 'campaign_source_google',					
	min_samples_leaf': 4,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',					
	max_features': 'sqrt',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',					
	max_depth': 93,	color_Cinza espacial', 'new_15lastdays', 'sku', 'label',					
	bootstrap': False}	compraPopular'],					
					0.86349 80		
Random forest	{'n_estimators': 420,	cant_seciones', 'event_checkout', 'event_conversion', 'skus',		89,4			
	min_samples_split': 2,	Computer', 'Smartphone', 'marca_lenovo', 'campaign_source_google',					
	min_samples_leaf': 4,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',					
	max_features': 'auto',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',					

	max_depth': 93,	color_Cinza espacial', 'new_15lastdays', 'sku', 'sku_3371.0',				
	bootstrap': True}	sku_6357.0'],				
SVM	probability=True, kernel=''	event_checkout', 'event_conversion', 'skus', 'Computer', 'Smartphone',		0,78	1	
		campaign_source_google', 'campaign_source_criteo',				
		campaign_source_rtbhouse', 'ventas_region', 'count_activity',				
	tu puedes!!!!	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',				
		new_15lastdays', 'label'				
mean	{'n_estimators': 420,	cant_seciones', 'event_checkout', 'event_conversion', 'skus',		89,5	86,3	
	min_samples_split': 2,	Computer', 'Smartphone', 'ventas_region', 'conversiones_15lastdays',				
	min_samples_leaf': 4,	checkout_15lastdays', 'viewed_15lastday', 'color_Cinza espacial',				
	max_features': 'auto',	new_15lastdays', 'sku', 'label'],				
	max_depth': 93,					
	bootstrap': True}					
Triple Mean	clf =XGBClassifier(					
	colsample_bylevel= 0.2,	Index(['event_checkout', 'event_conversion', 'event_lead', 'skus', 'Computer', 'Smartphone', 'campaign_source_google', 'campaign_source_criteo			86,06	
	colsample_bytree= 0.6,					
	gamma = 0.6,					
	learning_rate = 0.025,					
	max_depth = 11,					
	min_child_weight = 7,					
	n_estimators = 150,					
	silent = True					
	)					
	clf = RandomForestClassifier(bootstrap= True,					
	max_depth= 110,					
	max_features = 'auto',					
	min_samples_leaf=4,					
	min_samples_split= 5,					
	n_estimators= 724)					
lightGBM	default	event_checkout', 'event_conversion', 'skus', 'Computer', 'Smartphone',	lightGBM1	1		
		conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',				
		new_15lastdays'				
				89,4	86.456	
Random Forest		(['cant_seciones', 'event_checkout', 'event_conversion', 'skus',				
	Hiperparametros	Computer', 'Smartphone', 'marca_lenovo', 'campaign_source_google',				
	{'n_estimators': 393,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',				
	min_samples_split': 5,	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',				
	min_samples_leaf': 4,	color_Cinza espacial', 'new_15lastdays', 'sku', 'label',				
	max_features': 'auto',	usuario_poco_util', 'sku_3371.0', 'sku_6357.0'],				
	max_depth': 10,					
	bootstrap': False}					
Random Forest	{'n_estimators': 200,	cant_seciones', 'event_checkout', 'event_conversion', 'skus',		89,5	86,206	
	min_samples_split': 10,	Computer', 'Smartphone', 'marca_lenovo', 'campaign_source_google',				
	min_samples_leaf': 1,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',				
	max_features': 'sqrt',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',				
	max_depth': 10,	color_Cinza espacial', 'new_15lastdays', 'sku', 'label',				
	bootstrap': True}	usuario_poco_util', 'usuario_muy_activo', 'usuario_convertidor',				
		sku_3371.0', 'sku_6357.0'],				
Random Forest	{'n_estimators': 751,	['cant_seciones', 'event_checkout', 'event_conversion', 'skus',		89,4	86,193	
	min_samples_split': 2,	Computer', 'Smartphone', 'marca_lenovo', 'campaign_source_google',				
	min_samples_leaf': 4,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',				
	max_features': 'auto',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',				
	max_depth': 10,	color_Cinza espacial', 'new_15lastdays', 'sku', 'label',				
	bootstrap': False}	usuario_poco_util', 'usuario_muy_activo', 'usuario_convertidor'],				
					86.314	
Mean con los ante	{'silent': True,					

	n_estimators': 200,				
	min_child_weight': 8,				
	max_depth': 12,				
	learning_rate': 0.01,				
	gamma': 0.7,				
	colsample_bytree': 0.8,				
	colsample_bylevel': 0.8}				
Random Forest	n_estimators': 393,	cant_seciones', 'event_checkout', 'event_conversion', 'skus',		89,8	86.213
	min_samples_split': 2,	Computer', 'Smartphone', 'campaign_source_google',			
	min_samples_leaf': 4,	campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',			
	max_features': 'sqrt',	conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',			
	max_depth': None,	color_Cinza espacial', 'new_15lastdays', 'sku', 'label',			
	bootstrap': True}	usuario_poco_util', 'usuario_muy_activo', 'usuario_convertidor'],			
			89.408.180.800.3	85,2	
Random		['cant_seciones', 'event_checkout', 'event_conversion', 'skus',			
		Computer', 'Smartphone', 'marca_lenovo', 'campaign_source_google',			
		campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region',			
		conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday',			
		color_Cinza espacial', 'new_15lastdays', 'sku', 'label',			
		prob_marca_en_base_checkout', 'versiones_malas', 'marcas_malas',			
		activo'],			
rf	clf = RandomForestClassifier(n_estimators = 227,	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region', 'count_activity', 'checkout_15lastdays', 'viewed_15lastday', 'color_Preto', 'color_Dourado', 'color_Branco', 'color_Cinza espacial', 'new_15lastdays', 'sku', 'label'	0,8782	0,8640900	
	min_samples_split= 10,				
	min_samples_leaf= 4,				
	max_features = 'sqrt',				
	max_depth= 60,				
	bootstrap= True				
	)				
RF	clf = RandomForestClassifier(n_estimators = 365, min_samples_split= 10, min_samples_leaf= 2, max_features = 'sqrt', max_depth= 93, bootstrap= True	['cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region', 'count_activity', 'checkout_15lastdays', 'viewed_15lastday', 'color_Preto', 'color_Dourado', 'color_Branco', 'color_Cinza espacial', 'new_15lastdays', 'sku', 'checkout_7lastdays'	0,882156	0,8648	
RF	clf = RandomForestClassifier(n_estimators = 806, min_samples_split= 5, min_samples_leaf= 2, max_features = 'auto', max_depth= 76, bootstrap= True)	cant_seciones', 'event_checkout', 'event_conversion', 'Computer', 'campaign_source_google', 'campaign_source_criteo', 'campaign_source_rtbhouse', 'ventas_region', 'count_activity', 'conversiones_15lastdays', 'checkout_15lastdays', 'viewed_15lastday', 'color_Preto', 'color_Dourado', 'color_Branco', 'color_Cinza espacial', 'new_15lastdays', 'sku', 'label', 'checkout_7lastdays']	0,8814278647	0,86597	
RF		['cant_seciones', 'event_checkout', 'event_conversion', 'Computer',		88,9	86,8
	{'n_estimators': 558,	marca_samsung', 'condition_Bom', 'checkout_15lastdays', 'color_Preto',			
	min_samples_split': 2,	color_Dourado', 'color_Branco', 'color_Cinza espacial',			
	min_samples_leaf': 4,	new_15lastdays', 'Prob_samsung', 'sku_multiple', 'label',			
	max_features': 'sqrt',	prob_marca_en_base_checkout', 'sku_0.0', 'usuario_buscador',			
	max_depth': 43,	conversiones_lastmonth', 'viewed_lastmonth', 'checkout_21lastdays',			
	bootstrap': True}	conversiones_7lastdays', 'checkout_7lastdays']			