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"session\_name": "test",

"session\_description": "test",

"design\_state\_data": {

"session\_info" : {

"project\_id": "1",

"experiment\_id": "kkkk-11",

"dataset":"iris\_modified.csv",

"session\_name": "test",

"session\_description": "test"

},

"target": {

"prediction\_type": "Regression",

"target": "petal\_width",

"type":"regression",

"partitioning": true

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"train": {

"policy": "Split the dataset",

"time\_variable": "sepal\_length",

"sampling\_method": "No sampling(whole data)",

"split": "Randomly",

"k\_fold": false,

"train\_ratio": 0,

"random\_seed": 0

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"metrics": {

"optomize\_model\_hyperparameters\_for": "AUC",

"optimize\_threshold\_for": "F1 Score",

"compute\_lift\_at": 0,

"cost\_matrix\_gain\_for\_true\_prediction\_true\_result": 1,

"cost\_matrix\_gain\_for\_true\_prediction\_false\_result": 0,

"cost\_matrix\_gain\_for\_false\_prediction\_true\_result": 0,

"cost\_matrix\_gain\_for\_false\_prediction\_false\_result": 0

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"feature\_handling": {

"sepal\_length": {

"feature\_name": "sepal\_length",

"is\_selected": true,

"feature\_variable\_type": "numerical",

"feature\_details": {

"numerical\_handling": "Keep as regular numerical feature",

"rescaling": "No rescaling",

"make\_derived\_feats": false,

"missing\_values": "Impute",

"impute\_with": "Average of values",

"impute\_value": 0

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"sepal\_width": {

"feature\_name": "sepal\_width",

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"feature\_details": {

"numerical\_handling": "Keep as regular numerical feature",

"rescaling": "No rescaling",

"make\_derived\_feats": false,

"missing\_values": "Impute",

"impute\_with": "custom",

"impute\_value": -1

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"petal\_length": {

"feature\_name": "petal\_length",

"is\_selected": true,

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"feature\_details": {

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"missing\_values": "Impute",

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"impute\_value": 0

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"feature\_name": "petal\_width",

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"rescaling": "No rescaling",

"make\_derived\_feats": false,

"missing\_values": "Impute",

"impute\_with": "custom",

"impute\_value": -2

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"species": {

"feature\_name": "species",

"is\_selected": true,

"feature\_variable\_type": "text",

"feature\_details": {

"text\_handling": "Tokenize and hash",

"hash\_columns": 0

}

}

},

"feature\_generation": {

"linear\_interactions": [["petal\_length", "sepal\_width"]],

"linear\_scalar\_type": "robust",

"polynomial\_interactions": [

"petal\_length/sepal\_width",

"petal\_width/species"

],

"explicit\_pairwise\_interactions": [

"sepal\_width/sepal\_length",

"petal\_width/sepal\_length"

]

},

"feature\_reduction": {

"feature\_reduction\_method": "Tree-based",

"num\_of\_features\_to\_keep": "4",

"num\_of\_trees": "5",

"depth\_of\_trees": "6"

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"hyperparameters": {

"stratergy": "Grid Search",

"shuffle\_grid": true,

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"max\_iterations": 2,

"max\_search\_time": 3,

"parallelism": 5,

"cross\_validation\_stratergy": "Time-based K-fold(with overlap)",

"num\_of\_folds": 6,

"split\_ratio": 0,

"stratified": true

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"weighting\_stratergy": {

"weighting\_stratergy\_method": "Sample weights",

"weighting\_stratergy\_weight\_variable": "petal\_length"

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"probability\_calibration": {

"probability\_calibration\_method": "Sigmoid - Platt Scaling"

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"algorithms": {

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"model\_name": "Random Forest Classifier",

"is\_selected": false,

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"max\_depth": 30,

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"parallelism": 0

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"RandomForestRegressor": {

"model\_name": "Random Forest Regressor",

"is\_selected": true,

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"max\_trees": 20,

"feature\_sampling\_statergy": "Default",

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"max\_depth": 25,

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"GBTClassifier": {

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"is\_selected": false,

"num\_of\_BoostingStages": [67, 89],

"feature\_sampling\_statergy": "Fixed number",

"learningRate": [],

"use\_deviance": true,

"use\_exponential": false,

"fixed\_number": 22,

"min\_subsample": 1,

"max\_subsample": 2,

"min\_stepsize":0.1,

"max\_stepsize":0.5,

"min\_iter":20,

"max\_iter":40,

"min\_depth":5,

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"GBTRegressor": {

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"feature\_sampling\_statergy": "Fixed number",

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"fixed\_number": 22,

"min\_subsample": 1,

"max\_subsample": 2,

"min\_stepsize":0.1,

"max\_stepsize":0.5,

"min\_iter":20,

"max\_iter":40,

"min\_depth":5,

"max\_depth":7

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"LinearRegression": {

"model\_name": "LinearRegression",

"is\_selected": false,

"parallelism": 2,

"min\_iter":30,

"max\_iter":50,

"min\_regparam":0.5,

"max\_regparam":0.8,

"min\_elasticnet":0.5,

"max\_elasticnet":0.8

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"LogisticRegression": {

"model\_name": "LogisticRegression",

"is\_selected": false,

"parallelism": 2,

"min\_iter":30,

"max\_iter":50,

"min\_regparam":0.5,

"max\_regparam":0.8,

"min\_elasticnet":0.5,

"max\_elasticnet":0.8

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"RidgeRegression": {

"model\_name": "RidgeRegression",

"is\_selected": false,

"regularization\_term": "Specify values to test",

"min\_iter":30,

"max\_iter":50,

"min\_regparam":0.5,

"max\_regparam":0.8

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"LassoRegression": {

"model\_name": "Lasso Regression",

"is\_selected": false,

"regularization\_term": "Specify values to test",

"min\_iter":30,

"max\_iter":50,

"min\_regparam":0.5,

"max\_regparam":0.8

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"ElasticNetRegression": {

"model\_name": "Lasso Regression",

"is\_selected": false,

"regularization\_term": "Specify values to test",

"min\_iter":30,

"max\_iter":50,

"min\_regparam":0.5,

"max\_regparam":0.8,

"min\_elasticnet":0.5,

"max\_elasticnet":0.8

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"xg\_boost": {

"model\_name": "XG Boost",

"is\_selected": false,

"use\_gradient\_boosted\_tree": true,

"dart": true,

"tree\_method": "",

"random\_state": 0,

"max\_num\_of\_trees": 0,

"early\_stopping": true,

"early\_stopping\_rounds": 2,

"max\_depth\_of\_tree": [56, 89],

"learningRate": [89, 76],

"l1\_regularization": [77],

"l2\_regularization": [78],

"gamma": [68],

"min\_child\_weight": [67],

"sub\_sample": [67],

"col\_sample\_by\_tree": [67],

"replace\_missing\_values": false,

"parallelism": 0

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"DecisionTreeRegressor": {

"model\_name": "Decision Tree",

"is\_selected": false,

"min\_depth":4,

"max\_depth": 7,

"use\_gini": false,

"use\_entropy": true,

"min\_samples\_per\_leaf": [12, 6],

"use\_best": true,

"use\_random": true

},

"DecisionTreeClassifier": {

"model\_name": "Decision Tree",

"is\_selected": false,

"min\_depth":4,

"max\_depth": 7,

"use\_gini": false,

"use\_entropy": true,

"min\_samples\_per\_leaf": [12, 6],

"use\_best": true,

"use\_random": true

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"SVM": {

"model\_name": "Support Vector Machine",

"is\_selected": false,

"linear\_kernel": true,

"rep\_kernel": true,

"polynomial\_kernel": true,

"sigmoid\_kernel": true,

"c\_value": [566, 79],

"auto": true,

"scale": true,

"custom\_gamma\_values": true,

"tolerance": 7,

"max\_iterations": 7

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"SGD": {

"model\_name": "Stochastic Gradient Descent",

"is\_selected": false,

"use\_logistics": true,

"use\_modified\_hubber\_loss": false,

"max\_iterations": false,

"tolerance": 56,

"use\_l1\_regularization": "on",

"use\_l2\_regularization": "on",

"use\_elastic\_net\_regularization": true,

"alpha\_value": [79, 56],

"parallelism": 1

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"KNN": {

"model\_name": "KNN",

"is\_selected": false,

"k\_value": [78],

"distance\_weighting": true,

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"random\_state": 0,

"p\_value": 0

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"extra\_random\_trees": {

"model\_name": "Extra Random Trees",

"is\_selected": false,

"num\_of\_trees": [45, 489],

"feature\_sampling\_statergy": "Square root and Logarithm",

"max\_depth": [12, 45],

"min\_samples\_per\_leaf": [78, 56],

"parallelism": 3

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"neural\_network": {

"model\_name": "Neural Network",

"is\_selected": false,

"hidden\_layer\_sizes": [67, 89],

"activation": "",

"alpha\_value": 0,

"max\_iterations": 0,

"convergence\_tolerance": 0,

"early\_stopping": true,

"solver": "ADAM",

"shuffle\_data": true,

"initial\_learning\_rate": 0,

"automatic\_batching": true,

"beta\_1": 0,

"beta\_2": 0,

"epsilon": 0,

"power\_t": 0,

"momentum": 0,

"use\_nesterov\_momentum": false

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}

}

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