



Hyperparameters Tuning

Hyperparameters

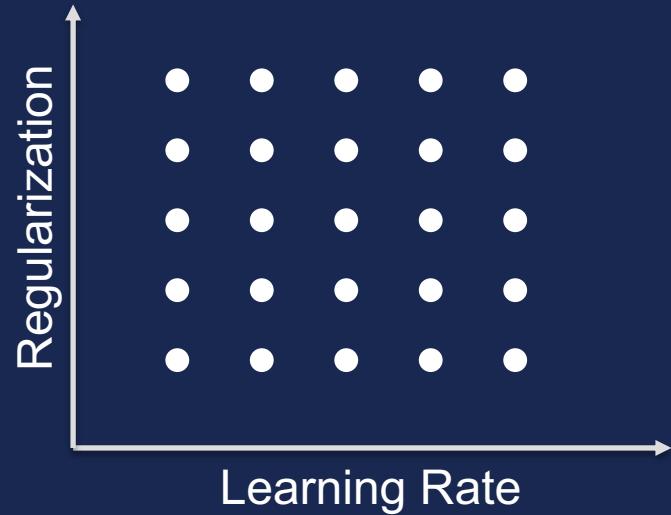
You can use hyperparameters to finely control training. We've set default hyperparameters for the algorithm you've chosen. [Learn more](#)

Key	Value
mode	skipgram ▾
min_count	5
window_size	5
negative_samples	5
epochs	5
vector_dim	100
batch_size	11
learning_rate	0.05
sampling_threshold	0.0001
evaluation	true ▾

```
#hyperparameter optimization
for C in C_values:
    for gamma in gamma_values:
        #train the model for every hyperparameter value pair
        svc = svm.SVC(C=C, gamma=gamma)
        svc.fit(X, y)
        score = svc.score(Xval, yval)

        #rate accuracy of the model using each hyperparam value pair
        if score > best_score:
            best_score = score
            best_params[ 'C' ] = C
            best_params[ 'gamma' ] = gamma
```

Grid Search



```
#for a preset number of iterations
for i in range(10):
    #try random values for each hyperparameter
    svc = svm.SVC(C=randint(0, 9), gamma=randint(0, 3))
    svc.fit(X, y)
    score = svc.score(Xval, yval)

    if score > best_score:
        best_score = score
        best_params['C'] = C
        best_params['gamma'] = gamma
```

Random Search



eta	eval_metric	gamma	max_depth	min_child_weight	num_round	objective	rate_drop	tweedie_variance_power	FinalObjectiveValue
0.438106	auc	6.657054	2.0	7.991031	50.0	binary:logistic	0.3	1.4	0.633613
0.297931	auc	7.609575	7.0	7.928488	50.0	binary:logistic	0.3	1.4	0.632067
0.268654	auc	6.736518	5.0	9.558967	50.0	binary:logistic	0.3	1.4	0.631693
0.428106	auc	6.747054	2.0	8.081031	50.0	binary:logistic	0.3	1.4	0.631187
0.234279	auc	8.584330	10.0	9.117404	50.0	binary:logistic	0.3	1.4	0.625194
0.224279	auc	8.674330	10.0	9.207404	50.0	binary:logistic	0.3	1.4	0.625155
0.040757	auc	1.896129	4.0	8.946511	50.0	binary:logistic	0.3	1.4	0.614199
0.103715	auc	9.328742	1.0	8.745605	50.0	binary:logistic	0.3	1.4	0.612136
0.944688	auc	2.800941	6.0	6.015777	50.0	binary:logistic	0.3	1.4	0.584103

Bayesian Optimization



Experiment 1

