Train In Data

Tomek Links

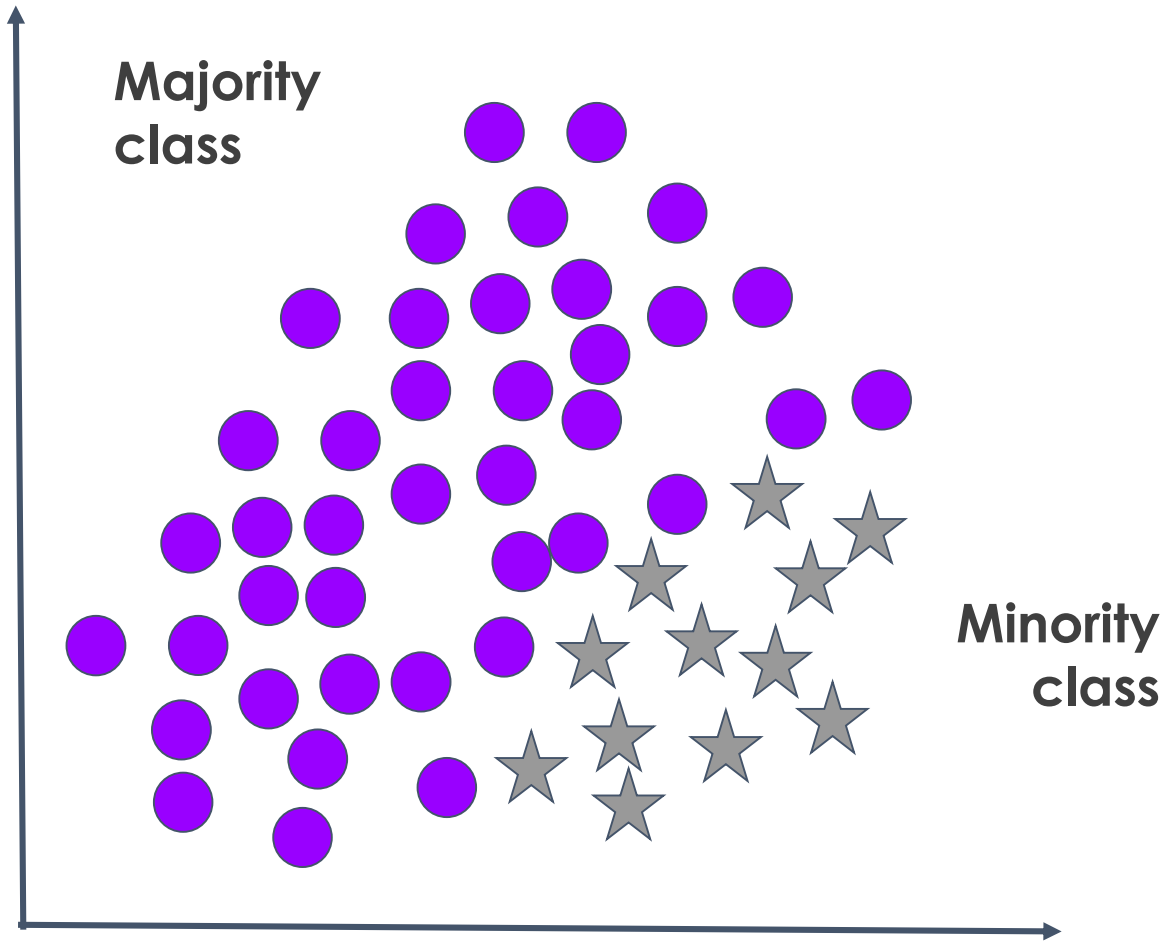
Tomek Links

If 2 samples are nearest neighbours, and from a different class, they are Tomek Links.

Removes the Tomek Link from the majority class

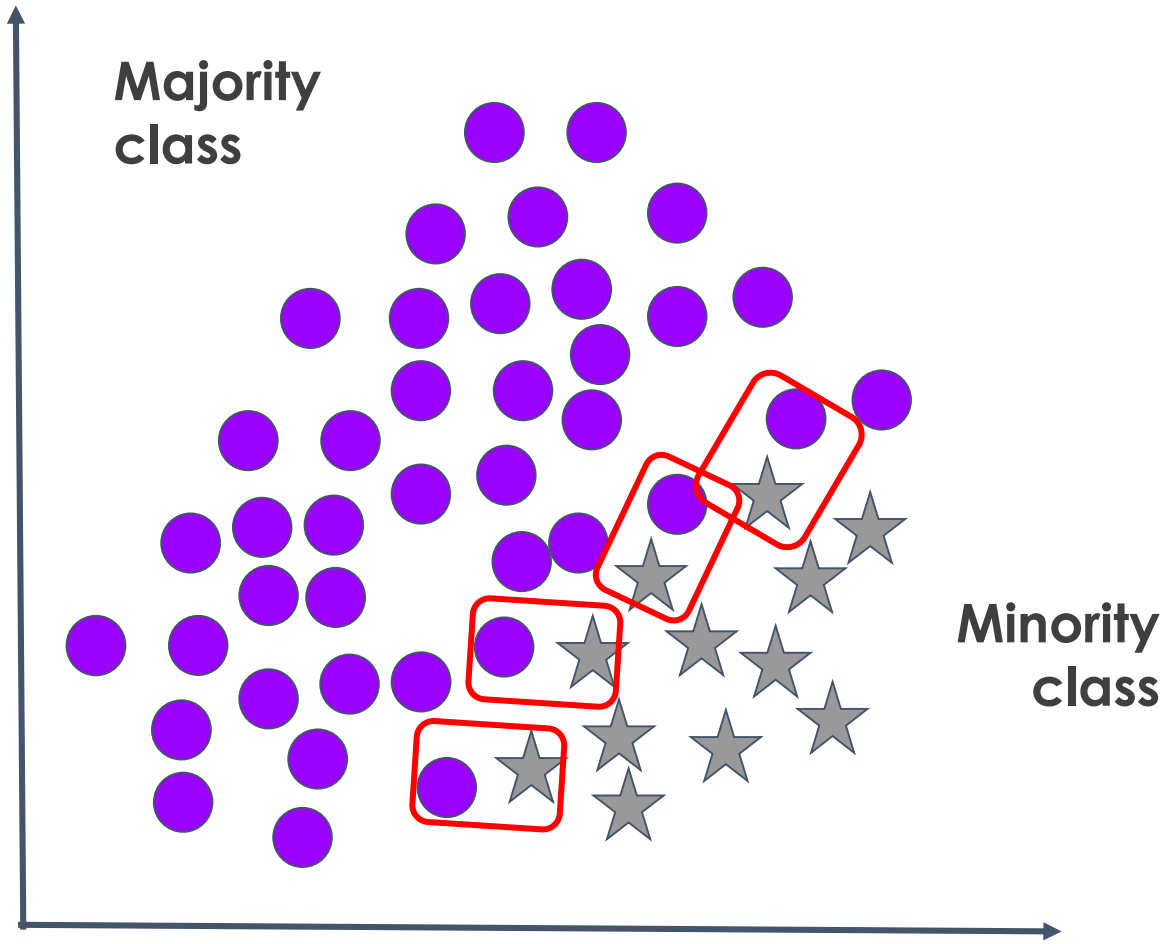
- Cleaning
- Final dataset shape varies
- Boundary is noise

Tomek Links



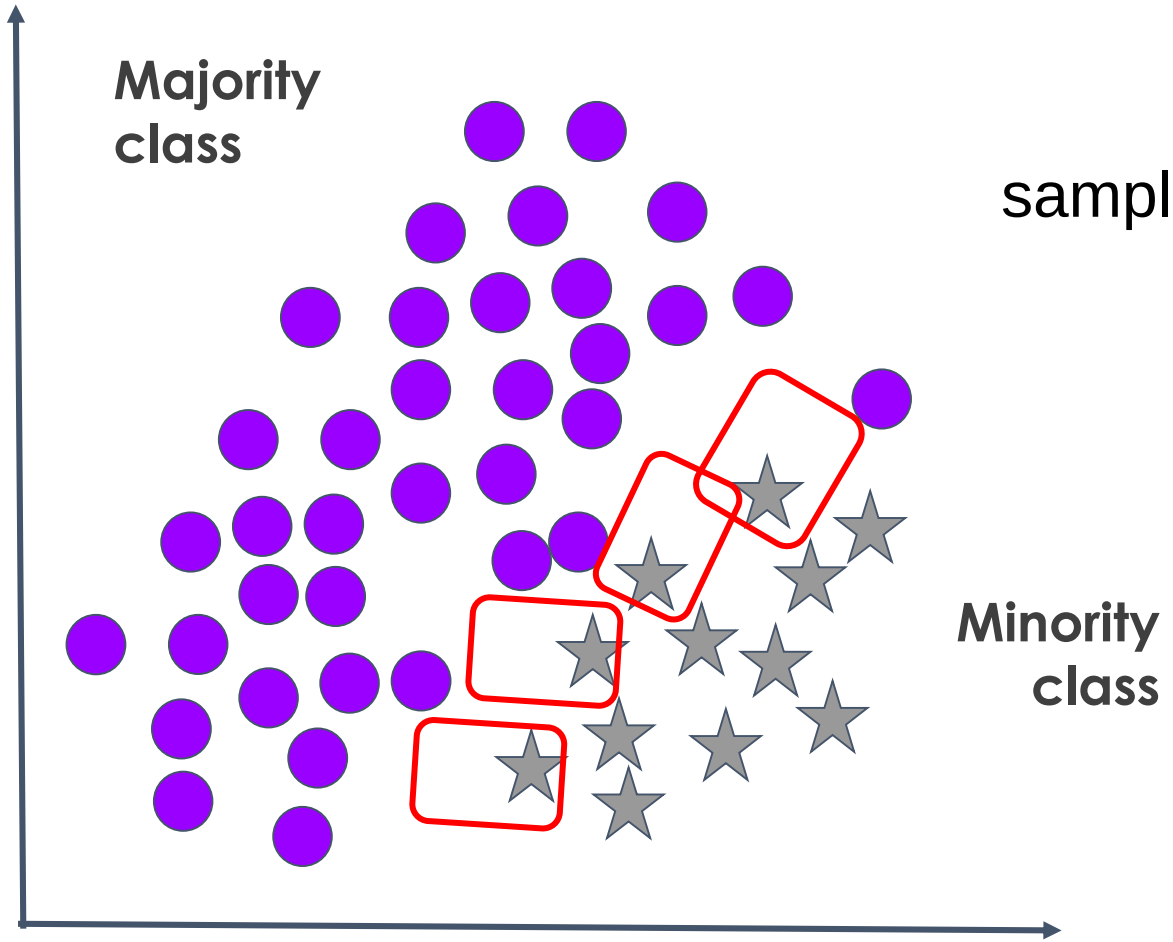
Tomek Links

Find Tomek Links



Tomek Links

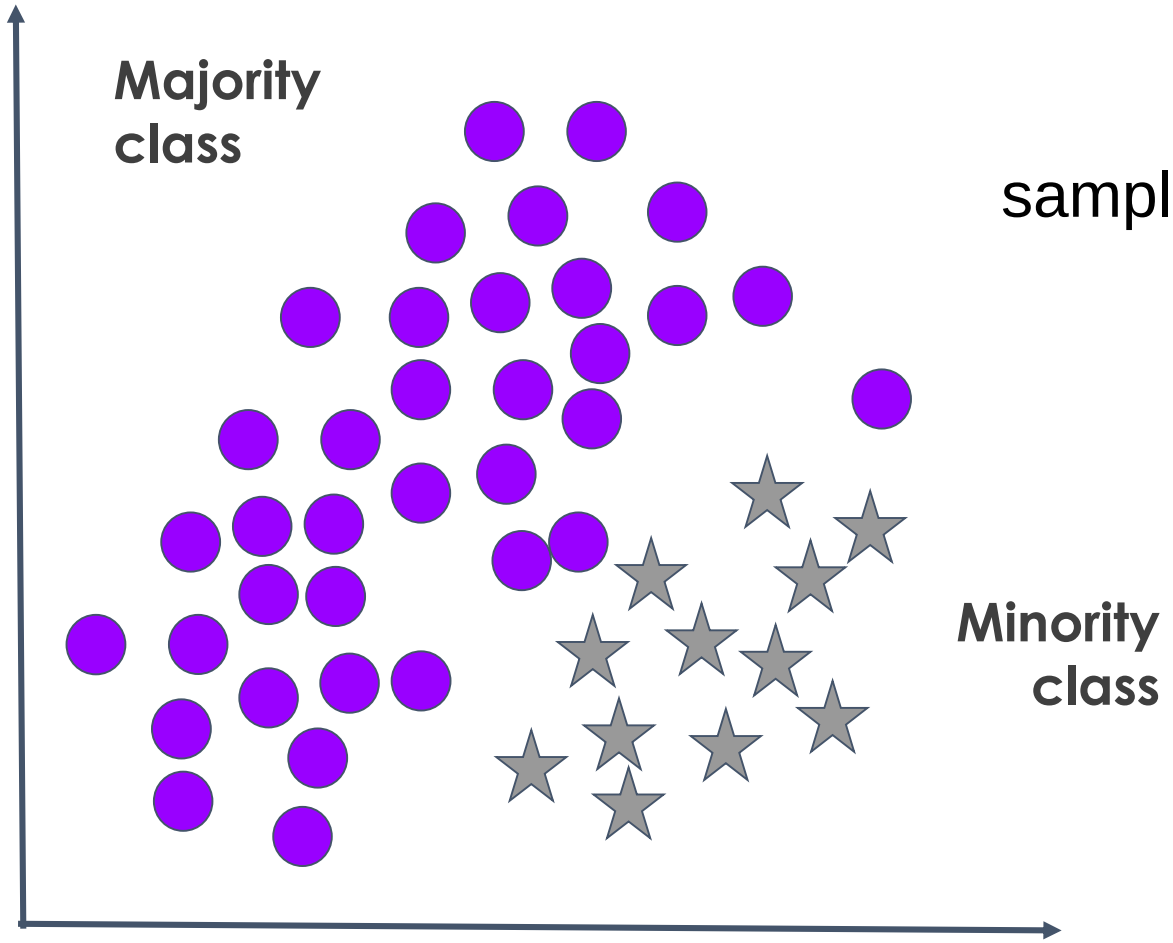
Remove observation from majority class in Tomek Link



sample_strategy = ‘auto’

Tomek Links

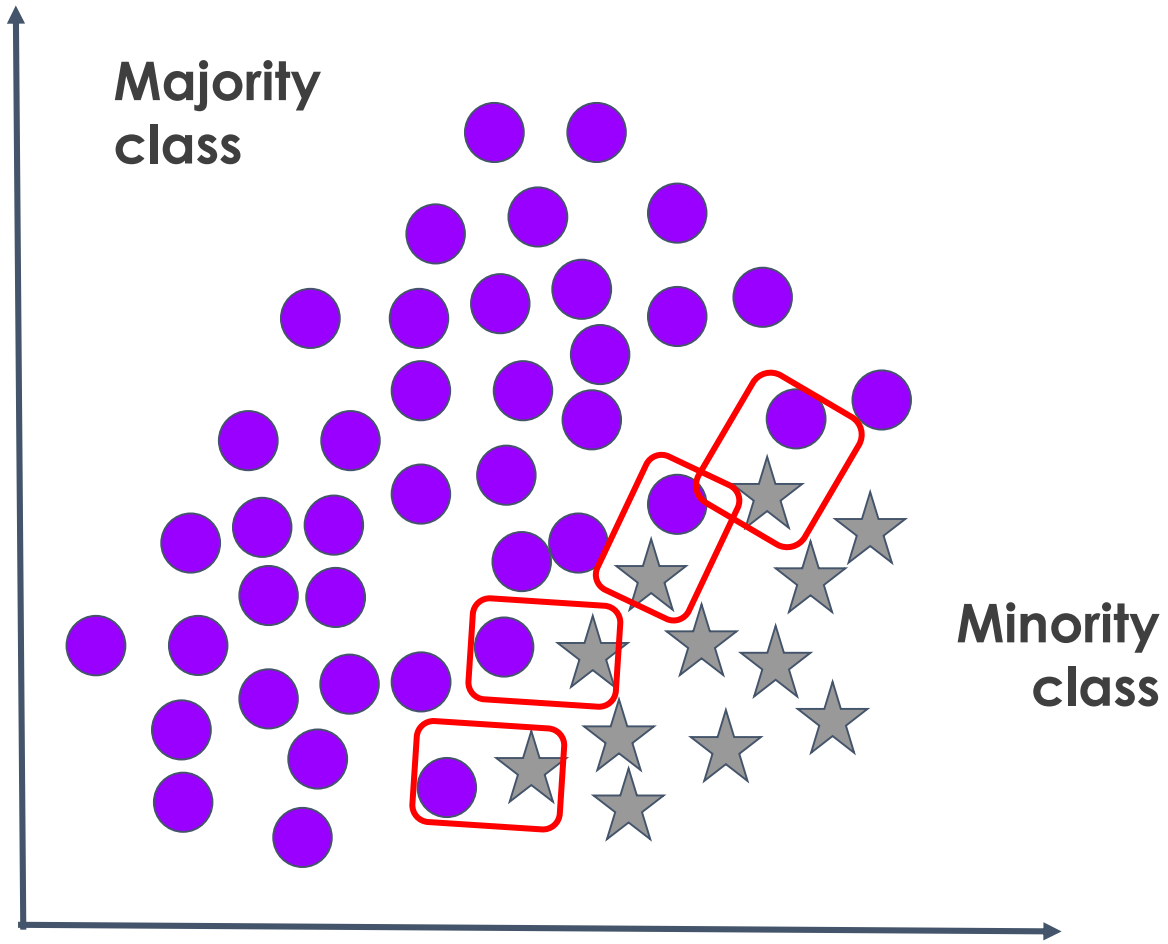
Remove observation from majority class in Tomek Link



sample_strategy = ‘auto’

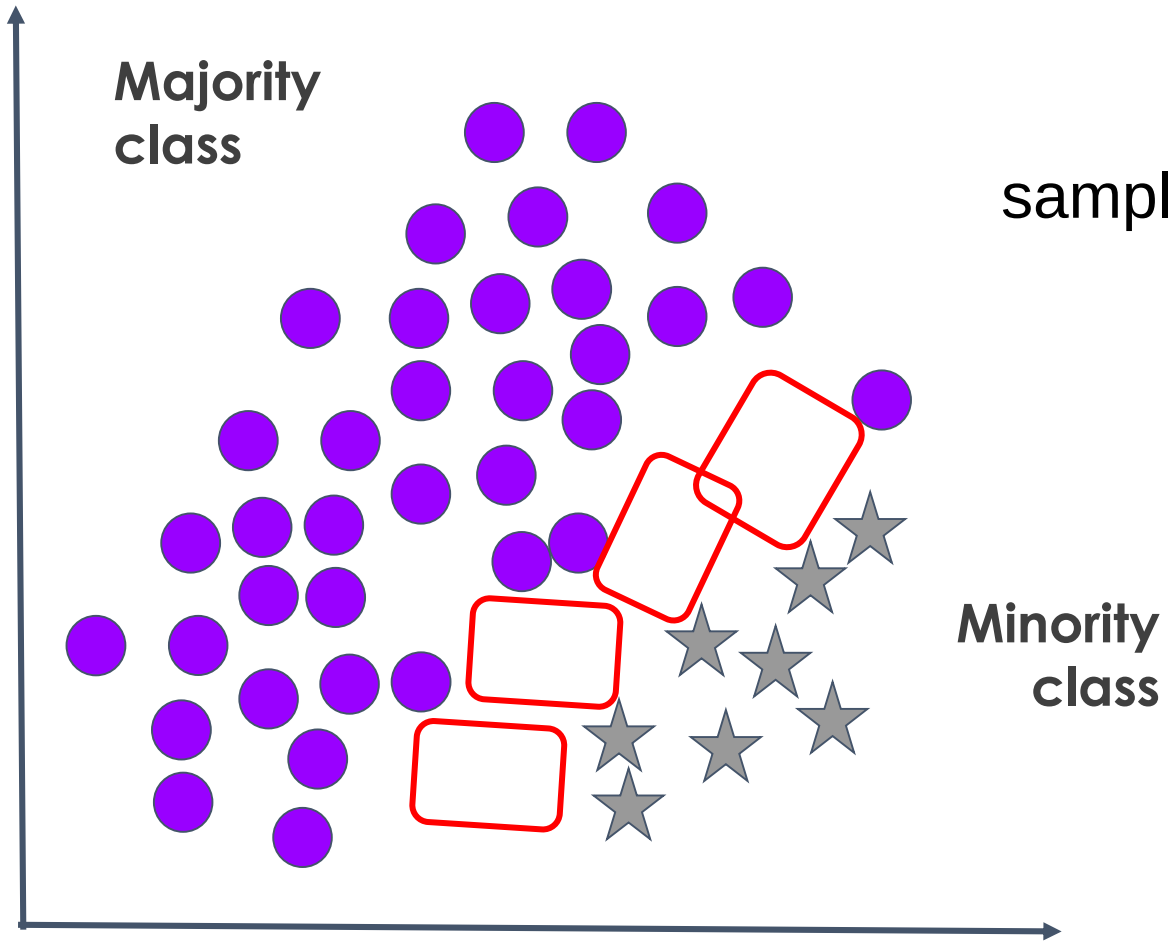
Tomek Links

Find Tomek Links



Tomek Links

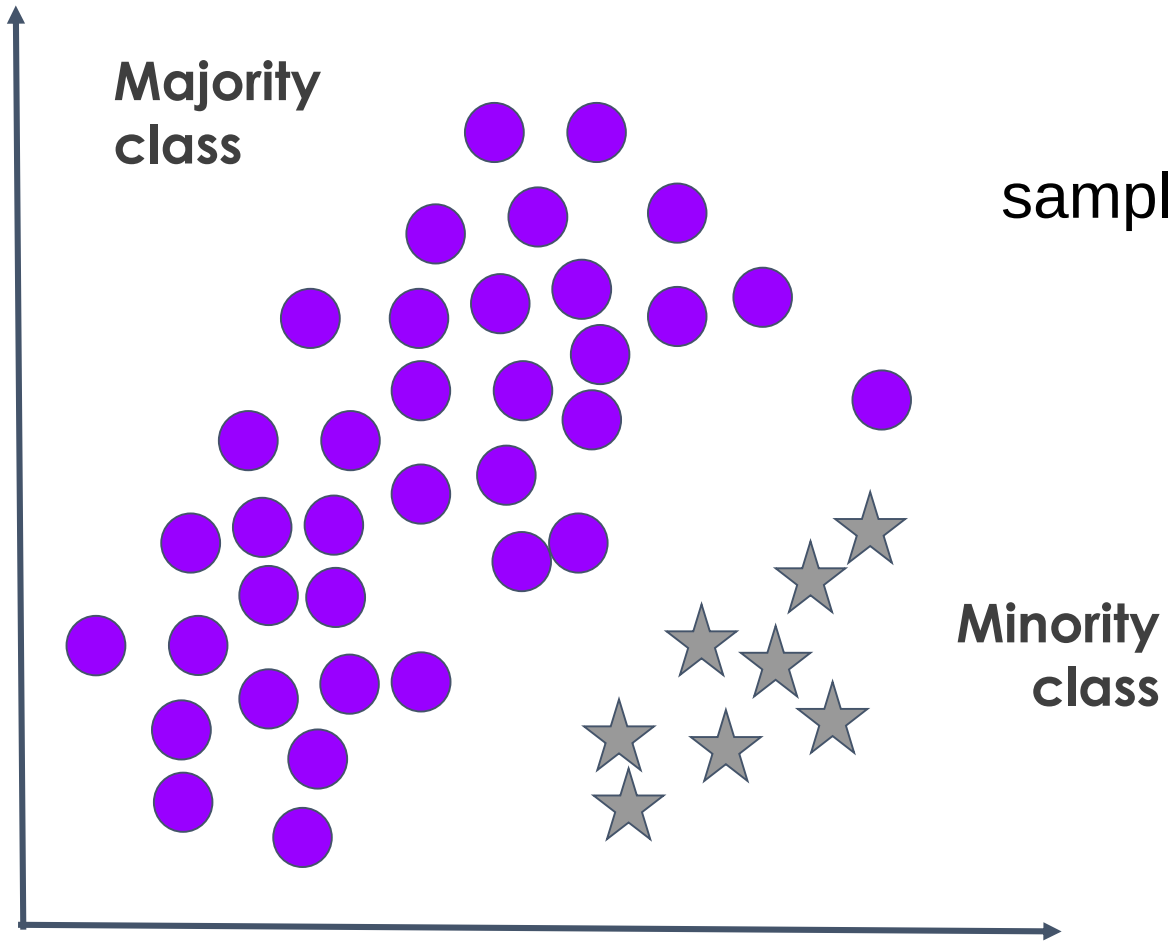
Remove entire Tomek Link



sample_strategy = ‘all’

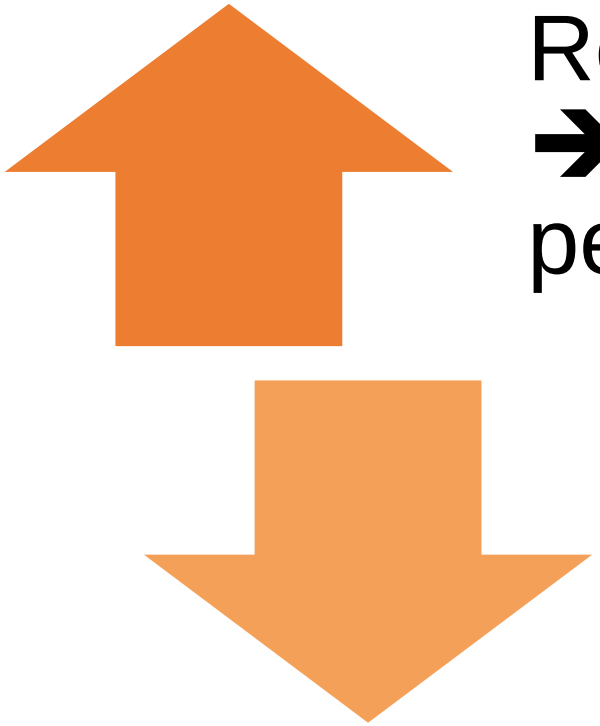
Tomek Links

Remove entire Tomek Link



sample_strategy = ‘all’

Tomek Links



Removes noise
➔ improves performance

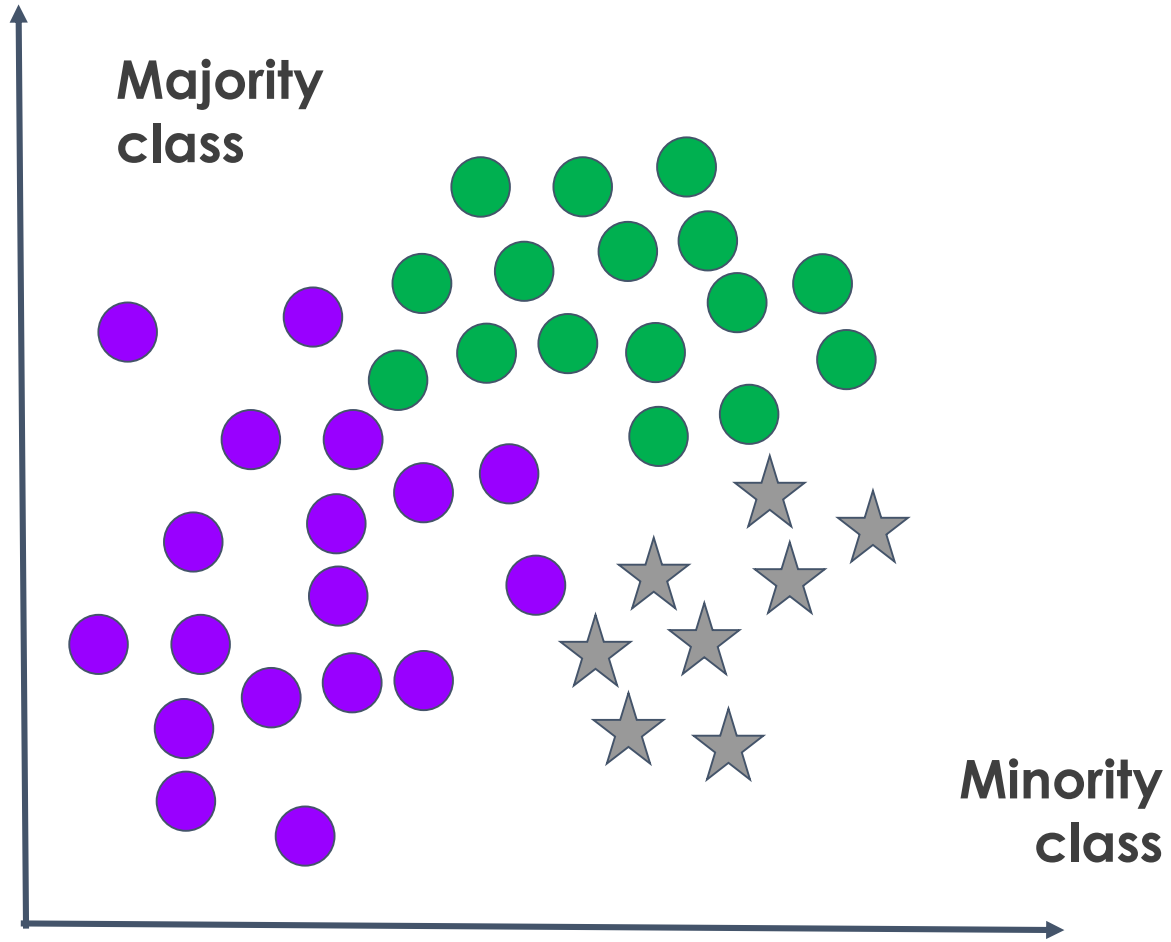
Miss classifies hard cases

Imbalanced-learn: Tomek Links

:

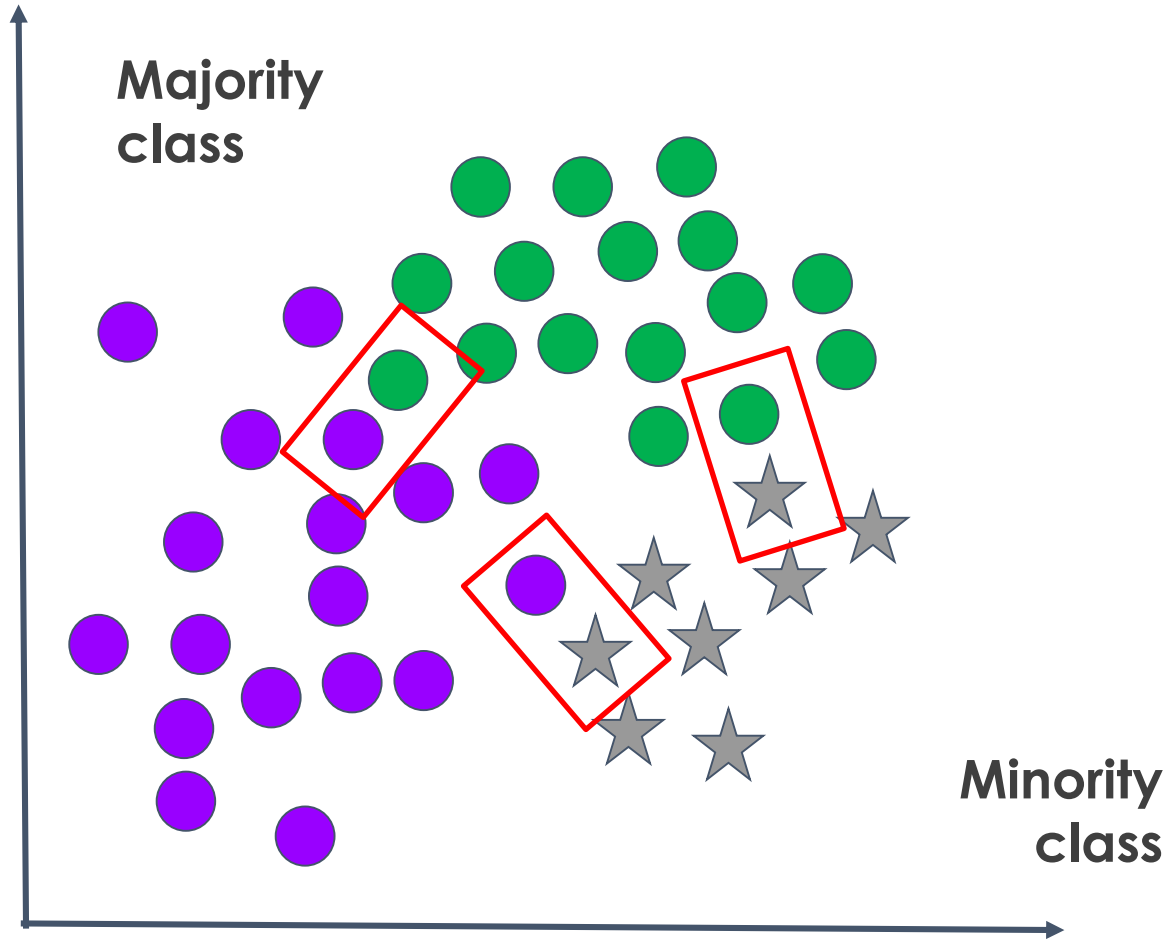
```
# create data
X, y = make_data(sep=0.5)

# set up Tomek Links

tl = TomekLinks(
    sampling_strategy='auto',  # undersamples only the majority class
    n_jobs=4)  # I have 4 cores in my laptop

X_resampled, y_resampled = tl.fit_resample(X, y)
```

Multi-class



One vs Rest

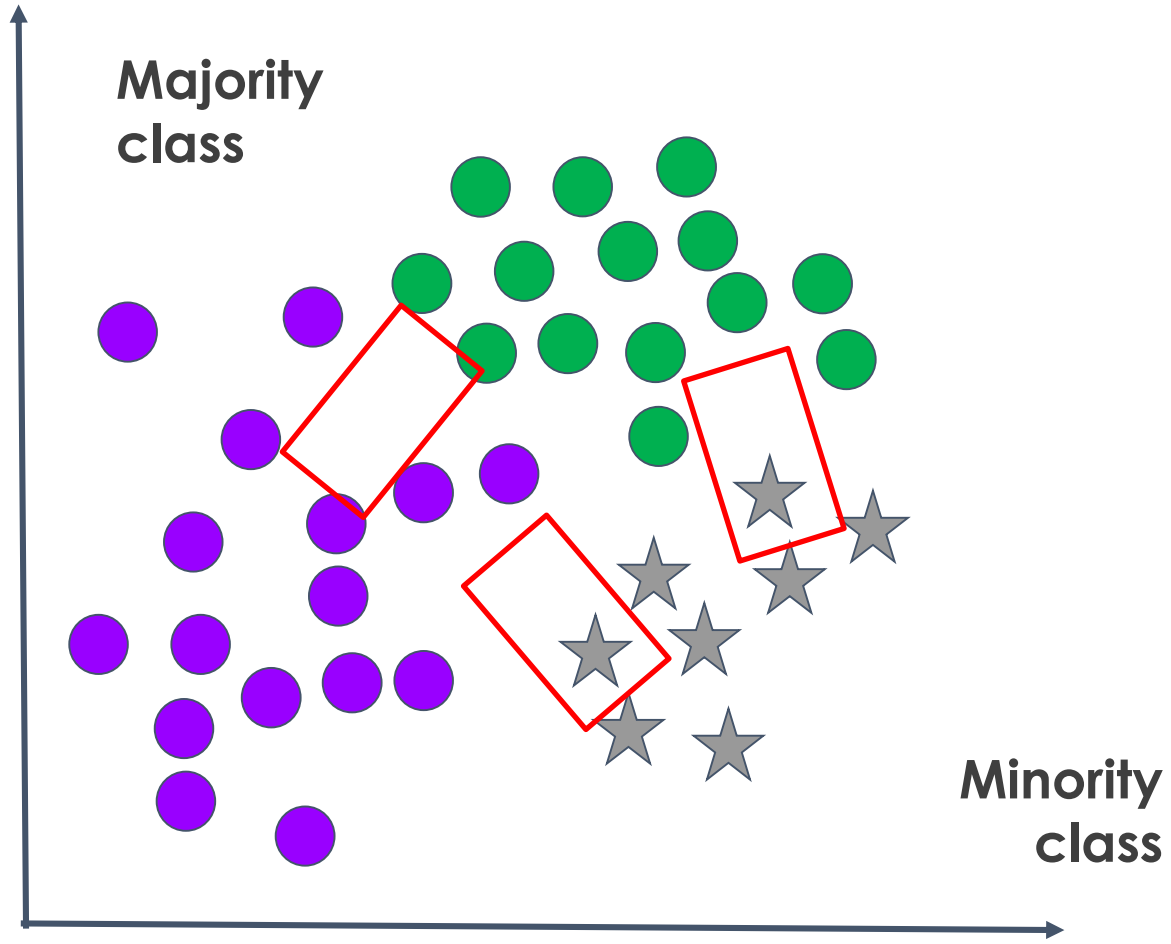
Multi-class



One vs Rest

Find Tomek Link

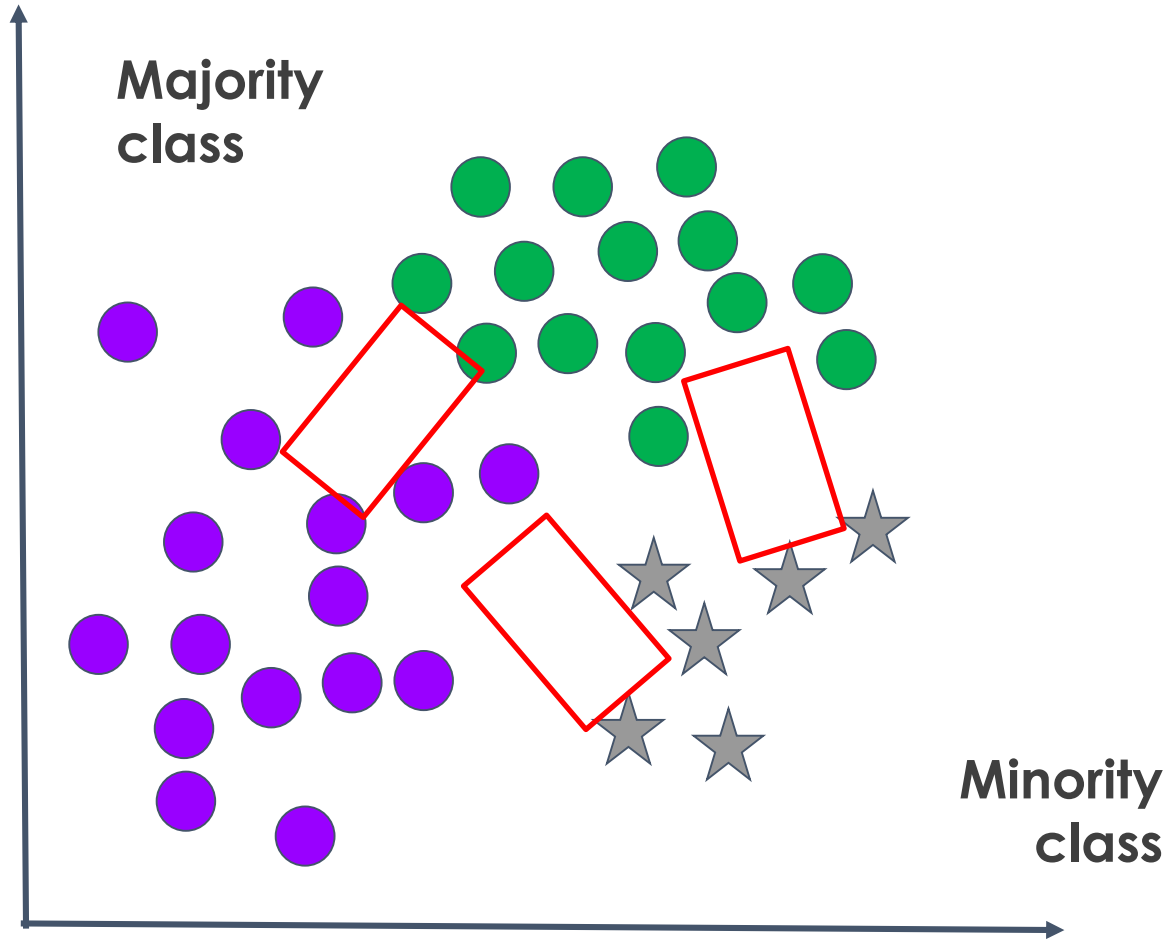
Multi-class



One vs Rest

Remove sample from majority.

Multi-class



One vs Rest

Remove entire Link.

Train In Data

THANK YOU

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