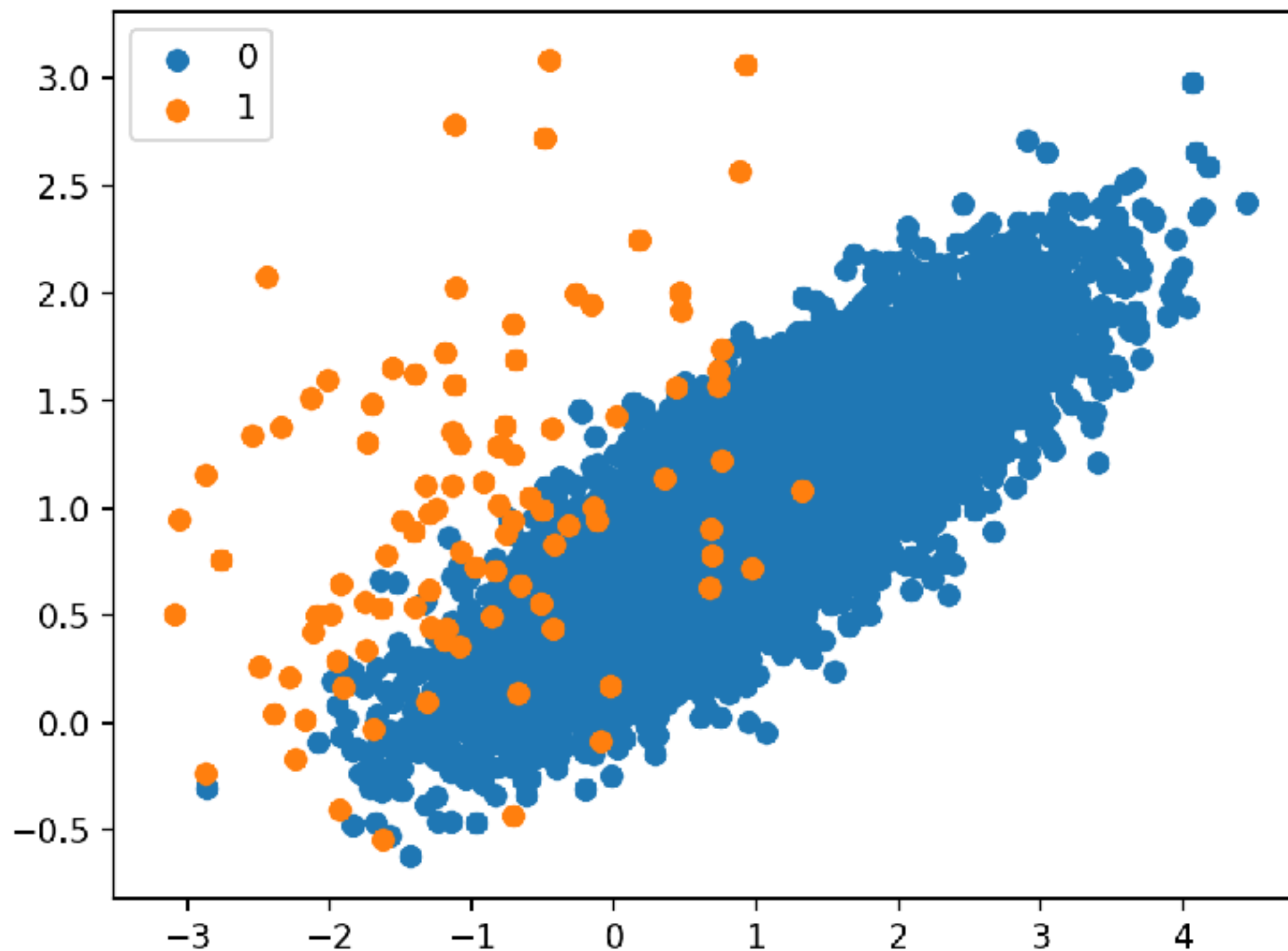


Synthetic Minority Oversampling Technique (SMOTE)

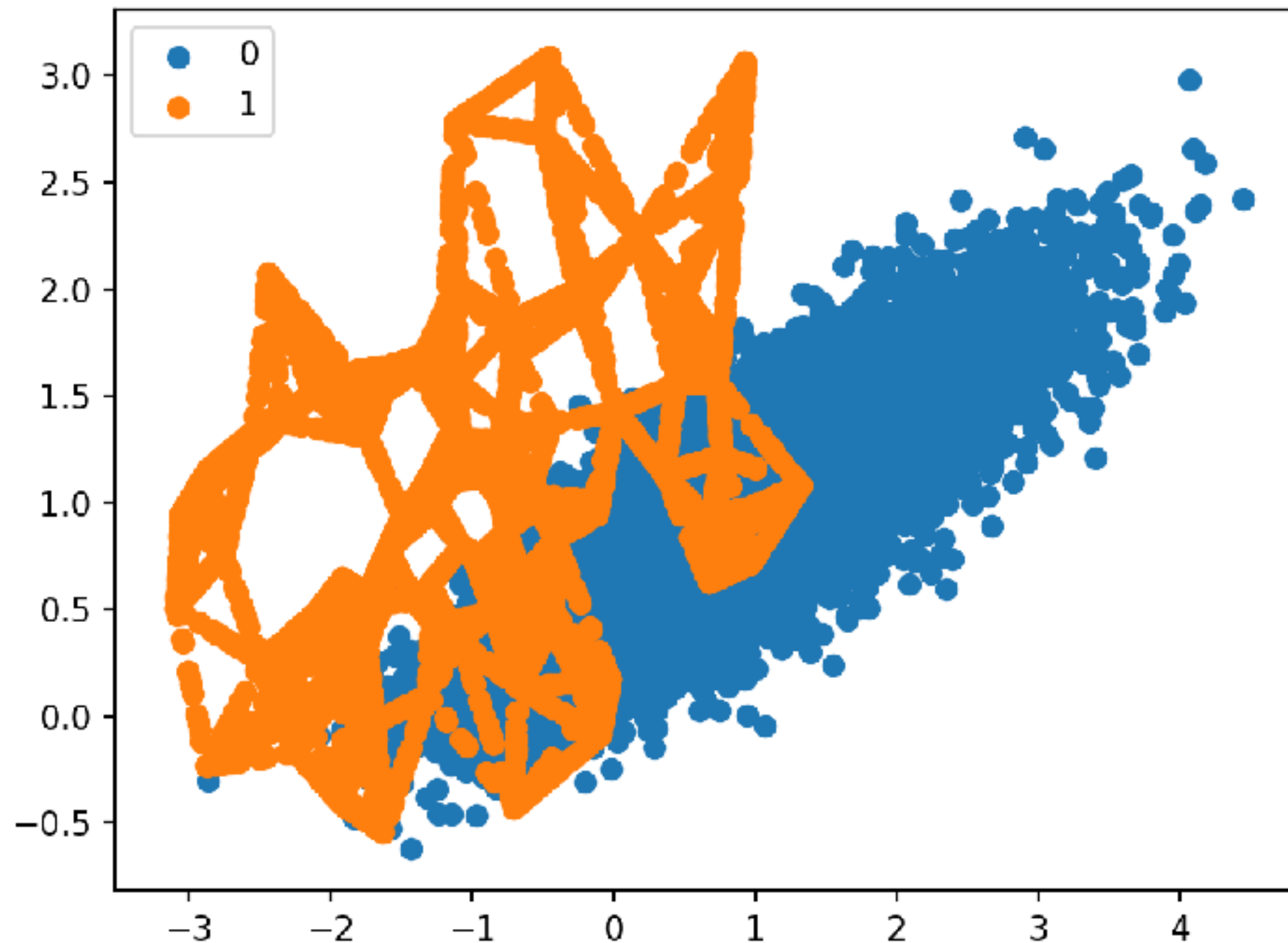
- Untuk data yang tidak seimbang (terdapat class yang jumlahnya tidak proporsional satu sama lain)
- SMOTE menghasilkan data buatan dengan melihat persebaran data pada class yang minoritas (jumlahnya lebih sedikit dibandingkan class lain)

```
from sklearn.model_selection import train_test_split  
x_train, x_test, y_train, y_test = train_test_split(data_x, Y, test_size=0.15)
```

```
from imblearn.over_sampling import SMOTE  
smt = SMOTE()  
x_train, y_train = smt.fit_sample(x_train, y_train)  
np.bincount(y_train)
```



<https://machinelearningmastery.com/smote-oversampling-for-imbalanced-classification/>



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