Module 3 Quiz

Quiz, 14 questions

13/14 points (92%)

Congratulations! You passed!

Next Item

1 / 1 points

1.
A supervised learning model has been built to predict whether someone is infected with a new strain of a virus. The probability of any one person having the virus is 1%. Using accuracy as a metric, what would be a good choice for a baseline accuracy score that the new model would want to outperform?

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1 / 1 points

Given the following confusion matrix:

	Predicted Positive	Predicted Negative
Condition Positive	96	4
Condition Negative	8	19

2. Compute the accuracy to three decimal places.

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1 / 1 points

Given the following confusion matrix:

	Predicted Positive	Predicted Negative
Condition Positive	96	4
Condition Negative	8	19

3. Compute the precision to three decimal places.

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1 / 1 points

Given the following confusion matrix:

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	Predicted Positive	Predicted Negative
Condition Positive	96	4
Condition Negative	8	19

4. Compute the recall to three decimal places.

✔ 1 / 1 points

Using the fitted model `m` create a precision-recall curve to answer the following question:

For the fitted model `m`, approximately what precision can we expect for a recall of 0.8?

5. (Use y_test and X_test to compute the precision-recall curve. If you wish to view a plot, you can use `plt.show()`)

```
1  print(m)
2  y_scores_lr = m.fit(X_train, y_train).decision_function(X_test)
3  precision, recall, thresholds = precision_recall_curve(y_test, y_scores_lr)
4  plt.plot(precision, recall, label='Precision-Recall Curve')
5  plt.show()
```

Run

Reset

✔ 1 / 1 points

6.

Given the following models and AUC scores, match each model to its corresponding ROC curve.

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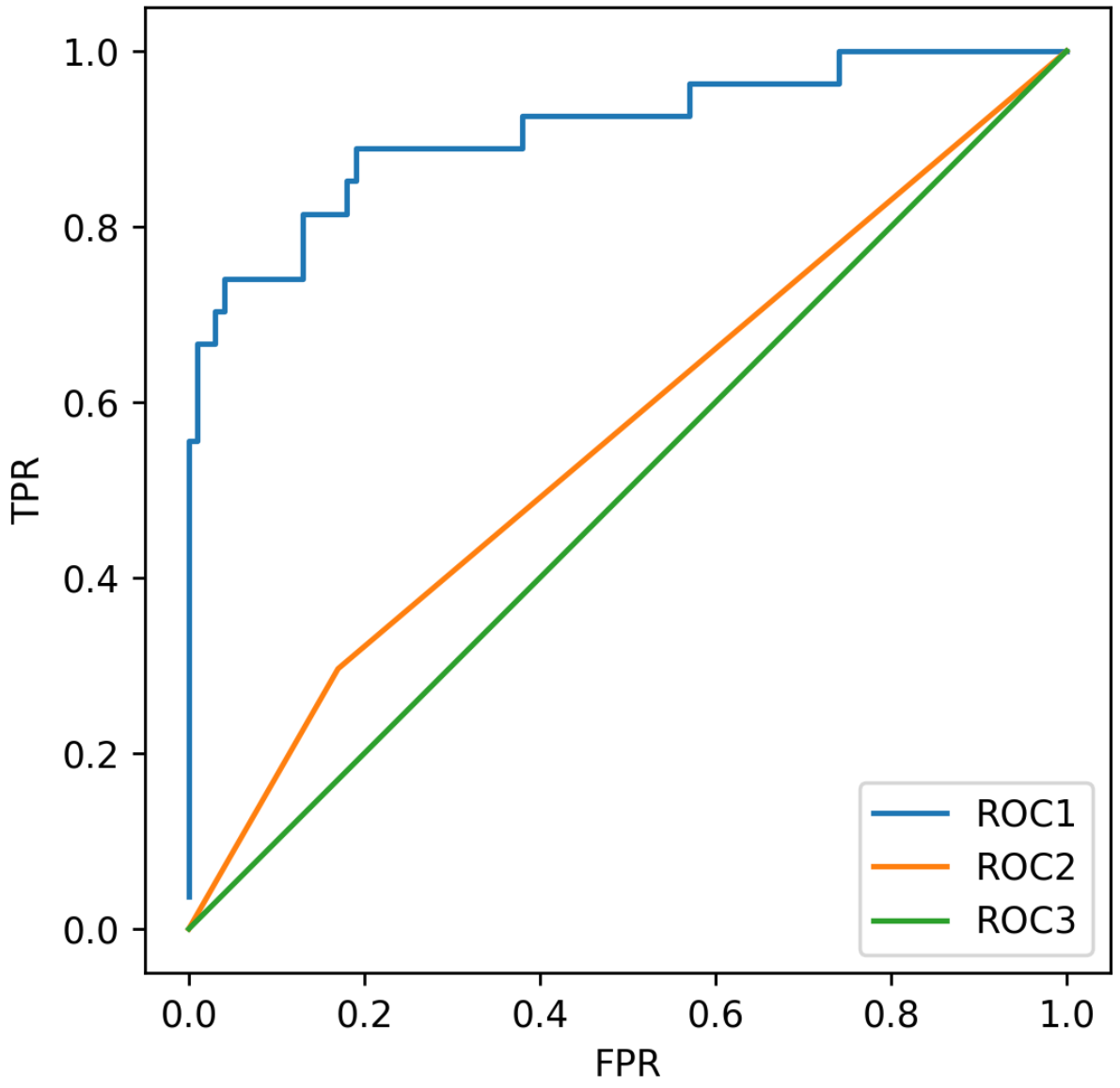
- Model 1 test set AUC score: 0.91
- Model 2 test set AUC score: 0.50
- Model 3 test set AUC score: 0.56



✖ 0 / 1 points

7.

Given the following models and accuracy scores, match each model to its corresponding ROC curve.

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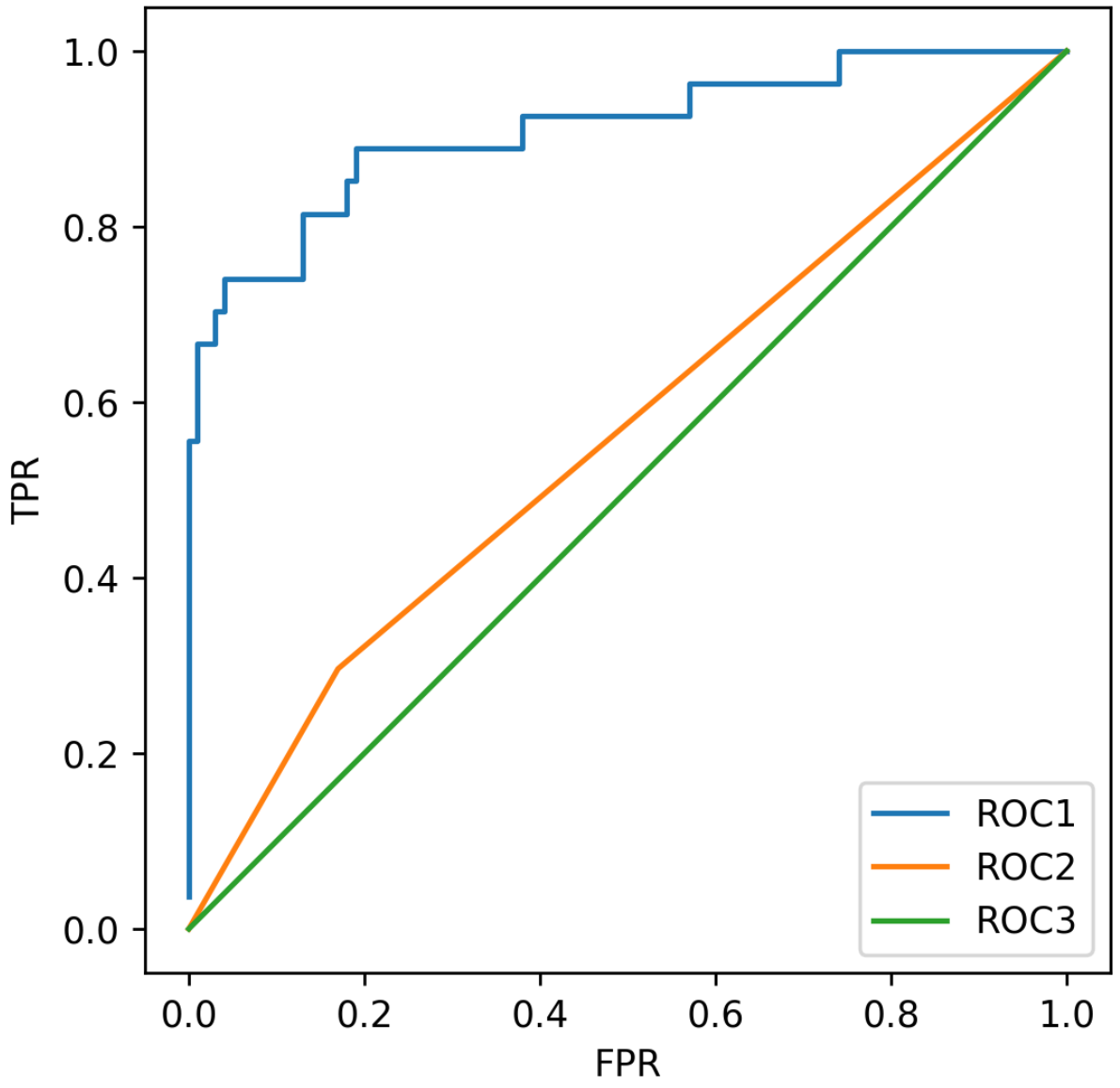
- Model 1 test set accuracy: 0.91
- Model 2 test set accuracy: 0.79
- Model 3 test set accuracy: 0.72



✔ 1 / 1 points

Using the fitted model `m` what is the micro precision score?

8. (Use y_test and X_test to compute the precision score.)

```
1  print(m)
2  svm = m.fit(X_train, y_train)
3  svm_predicted_mc = svm.predict(X_test)
4  print(precision_score(y_test, svm_predicted_mc, average = 'micro'))
```

Run

Reset

✔ 1 / 1 points