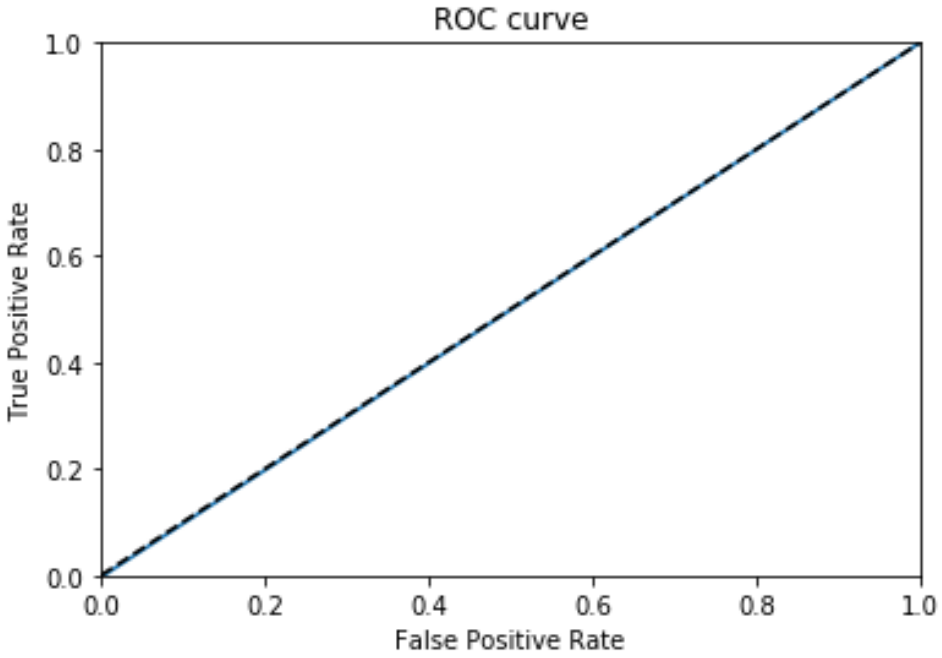
MODELS EVALUATION

Support Vector Machine with no cross validation (only train-test splitting)

Confusion Matrix	**NO**	**YES**
NO (Client <u>did not</u> subscribe deposit)	1101	4
YES (Client subscribed the deposit)	131	0

Metrics	*Value*
Precision	0.00
Recall	0.00
F1 Score	0.00

ROC Curve

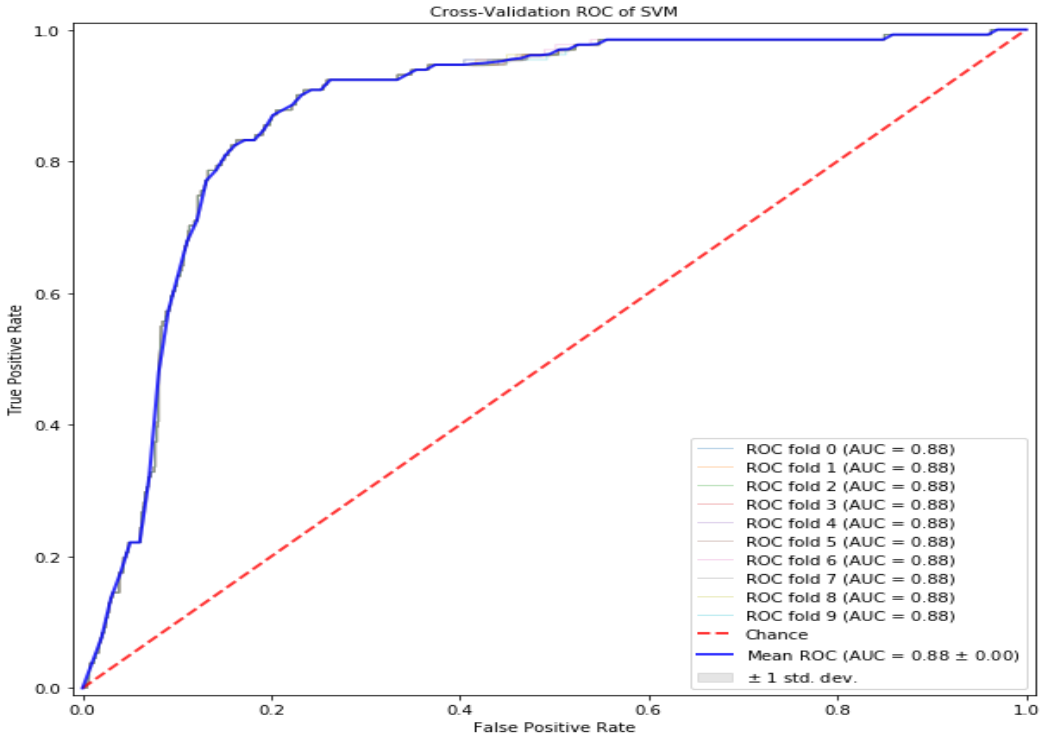


Area Under the Curve (AUC) = 0.49

Support Vector Machine with K-Cross Validation (K = 10)

Metrics	*Value*
Precision	0.87
Recall	0.88
F1 Score	0.83

ROC Curve



Area Under the Curve (AUC) = 0.88

Comment:

After applying 10-Cross-Validation, the model has improved substantially by obtaining good performance metrics. Plus, the ROC curve shows a good tradeoff between false positive and true positive rate.

Although the model would need further validations, it seems very promising so to suggest its applicability to predict clients' choice.