

# ML Predicting tennis shot quality from hawkeye data

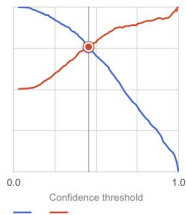
### Aggregate Metrics

Threshold	0.5000
Precision	0.7869
Recall	0.7040
Accuracy	0.7550
F1 score	0.7431
Log loss	0.5195
ROC AUC	0.8254

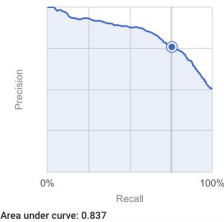
### Score threshold

Positive class threshold	0.4545
Positive class	short
Negative class	in
Precision	0.7587
Recall	0.7547
Accuracy	0.7557
F1 score	0.7567

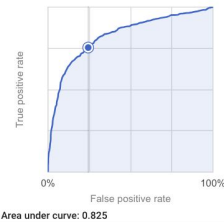
Precision-recall by threshold



Precision-recall curve



ROC curve



### Confusion matrix

This table shows how often the model classified each label correctly (in blue), and which labels were most often confused for that label (in gray).

True label	Predicted label	
	short	in
short	75%	25%
in	24%	76%

# Forecasting falling wickets in Cricket

Single point statistics					Grouping - False positives analysis					Grouping - True positives analysis				
This table shows how many times Monty fired with different levels of					This analysis groups predictions that happened close to each other (ie the last					This analysis groups predictions that happened close to each other (ie the last 10 predictions				
Confidence	Accuracy	Times	Right outcome		Points above 50%	Times	Time to wicket	Avg confidence		Points above 50%	Times	Time to wicket	Avg confidence	Max confidence
> 50%	43.38%	136	59		1	11	01:06:01	54%		1	2	00:02:06	55%	60%
> 65%	58.33%	36	21		2	3	#####	53%		2	1	00:10:32	59%	67%
> 75%	80.00%	10	8		3	6	01:25:59	61%		3	2	00:04:35	62%	71%
> 80%	100.00%	5	5		4	4	00:20:55	56%		4	2	00:04:26	60%	66%
> 90%	100.00%	3	3		5	1	02:33:54	60%		5	1	00:06:17	59%	66%
					6	2	00:32:45	58%		6	2	00:07:32	56%	63%
					Total	27	00:54:39	57%		7	1	00:05:22	61%	67%
						10				8	2	00:08:18	65%	91%
										10	1	00:05:17	75%	92%
										Total	14	00:06:03	61%	71%
											18			

## ML Predicting rugby events from player tracks

True labels	Predicted labels									
	Hit up	Kick	Marked	PTB	Pass	Possession - start	Receive	Run	Tackle	
Hit up	67%	-	-	-	-	-	-	33%	-	
Kick	14%	79%	-	-	-	7%	-	-	-	
Marked	-	-	100%	-	-	-	-	-	-	
PTB	-	-	-	89%	-	-	11%	-	-	
Pass	-	-	-	-	100%	-	-	-	-	
Possession - start	-	-	-	-	-	93%	7%	-	-	
Receive	-	-	-	-	-	4%	96%	-	-	
Run	6%	-	-	-	-	-	-	81%	13%	
Tackle	-	-	-	-	-	3%	8%	5%	85%	

# ML Estimating Basketball momentum from the Box Score

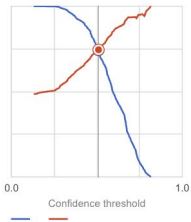
### Aggregate Metrics ?

Threshold ?	0.5000
Precision ?	0.7353
Recall ?	0.7598
Accuracy ?	0.7508
F1 score ?	0.7473
Log loss ?	0.5524
ROC AUC ?	0.8373

### Score threshold

Positive class threshold ?	0.5097
Positive class	1
Negative class	0
Precision ?	0.7450
Recall ?	0.7430
Accuracy ?	0.7520
F1 score ?	0.7440

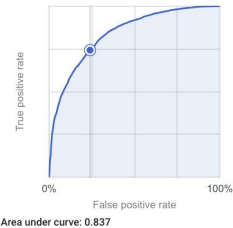
### Precision-recall by threshold ?



### Precision-recall curve ?



### ROC curve ?



### Confusion matrix

This table shows how often the model classified each label correctly (in blue), and which labels were most often confused for that label (in gray).

Item counts

True label	Predicted label	
	1	0
1	74%	26%
0	24%	76%