

Naïve Bayes on World Cup Data

Predict whether team ends in **group** or **knockout** stage based on **number of yellow cards per game** and **number of red cards per game**

team	games	stage	yellowCards	redCards	yellowPerGame	yellows	redPerGame	reds
Algeria	3	group	4	2	1.33	low	0.67	high
Argentina	5	knockout	7	0	1.40	low	0.00	none
Australia	3	group	7	2	2.33	high	0.67	high
Brazil	5	knockout	7	2	1.40	low	0.40	high
Cameroon	3	group	5	0	1.67	medium	0.00	none
Chile	4	knockout	13	1	3.25	high	0.25	medium
Denmark	3	group	6	0	2.00	medium	0.00	none
England	4	knockout	6	0	1.50	medium	0.00	none
Germany	6	knockout	8	1	1.33	low	0.17	medium
Ghana	5	knockout	11	0	2.20	high	0.00	none
Greece	3	group	5	0	1.67	medium	0.00	none
Honduras	3	group	7	0	2.33	high	0.00	none
Italy	3	group	5	0	1.67	medium	0.00	none
Ivory Coast	3	group	5	0	1.67	medium	0.00	none
Japan	4	knockout	7	0	1.75	medium	0.00	none
Mexico	4	knockout	9	0	2.25	high	0.00	none
Netherlands	6	knockout	15	0	2.50	high	0.00	none

Classification

CS102

Naïve Bayes on World Cup Data

group (.5)	yellows=low	.20	knockout (.5)	yellows=low	.33
	yellows=medium	.47		yellows=medium	.34
	yellows=high	.33		yellows=high	.33
	reds=none	.60		reds=none	.67
	reds=medium	.27		reds=medium	.27
	reds=high	.13		reds=high	.06

1. **France:** yellows=medium, reds=medium
group or knockout?
2. **USA:** yellows=high, reds=none
group or knockout?

Classification

CS102