YOUTUBE REACTIONS IN MUSIC #3

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1. Corpus presentation

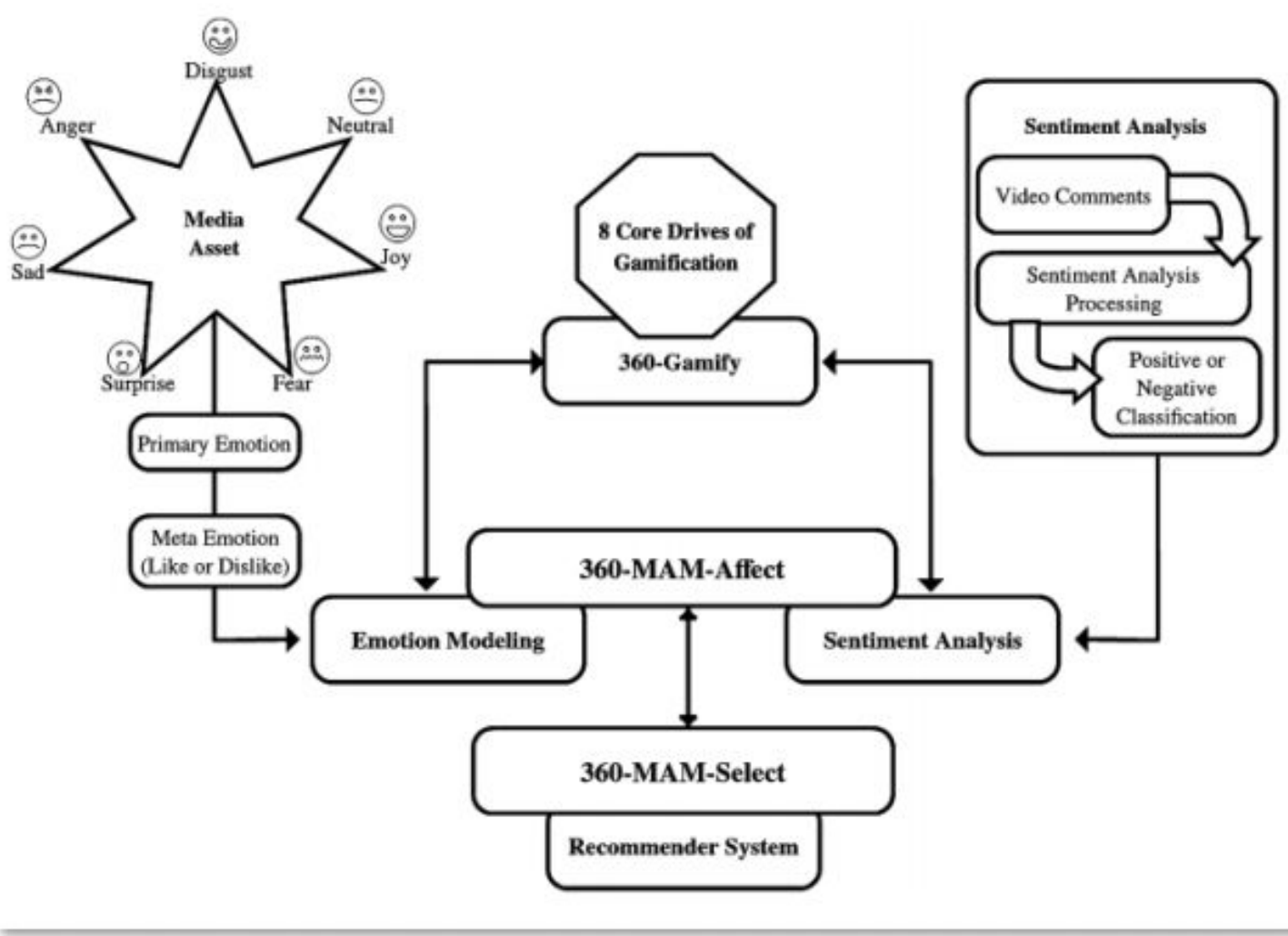
SEBASTIAN VATRA

```
47  def sentiment(comments):
48
49          if not os.path.isfile('classifier.pickle'):
50                  tcl.training()
51
52          fl = open('classifier.pickle','rb')
53          classifier = pickle.load(fl)
54          fl.close()
55
56          pos = 0
57          neg = 0
58          for words in comments:
59                  comment = features(words)
60                  sentiment_value, confidence = VoteClassifier(classifier).classify(comment)
61                  if sentiment_value == 'positive':# and confidence * 100 >= 60:
62                          pos += 1
63                  else:
64                          neg += 1
65
66          print ("Positive sentiment : ", (pos * 100.0 /len(comments)) )
67          print ("Negative sentiment : ", (neg * 100.0 /len(comments)) )
```

1. Corpus presentation

SEBASTIAN YATRA

```
def training():
        pos_sen = open("positive.txt", 'r', encoding = 'latin-1').read()
        neg_sen = open("negative.txt", 'r', encoding = 'latin-1').read()

        emoji = open("emoji.txt",'r', encoding = 'latin-1').read()
        pos_emoji = []
        neg_emoji = []
        for i in emoji.split('\n'):
                exp = ''
                if i[len(i)-2] == '-':
                        for j in range(len(i) - 2):
                                exp += i[j]
                        neg_emoji.append(( {exp : True}, 'negative'))
                else:
                        for j in range(len(i)-1):
                                exp += i[j]
                        pos_emoji.append(( {exp : True}, 'positive'))

        prev = [(features(words), 'positive') for words in pos_sen.split('\n')]
        nrev = [(features(words), 'negative') for words in neg_sen.split('\n')]

        pos_set = prev + pos_emoji
        neg_set = nrev + neg_emoji

        real_classifier = NaiveBayesClassifier.train(prev+nrev)

        # SAVE IN FILE TO AVOID TRAIINING THE DATA AGAIN
        save_doc = open("classifier.pickle", 'wb')
        pickle.dump(real_classifier, save_doc)
        save_doc.close()
```


Disgust
Anger
Neutral
Media Asset
Joy
Sad
Surprise
Fear
Primary Emotion
Meta Emotion (Like or Dislike)
8 Core Drives of Gamification
360-Gamify
Sentiment Analysis
Video Comments
Sentiment Analysis Processing
Positive or Negative Classification
360-MAM-Affect
Emotion Modeling
Sentiment Analysis
360-MAM-Select
Recommender System

1. Corpus presentation

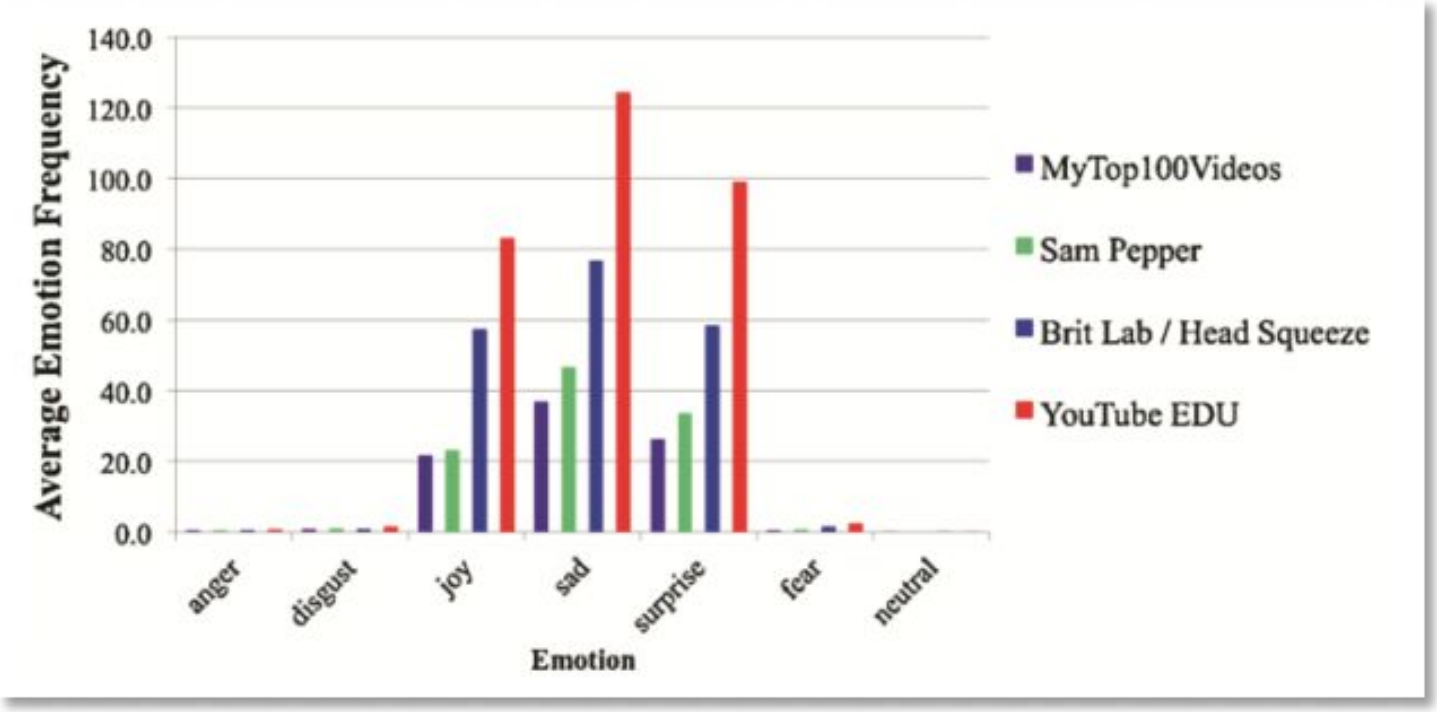


Figure 2: Bar Graphics results of average emotions frequency. Font:
https://pdfs.semanticscholar.org/1451/573d1060c6f3965a41bc69bb1b413dc1de26.pdf

1. Corpus presentation

Table 2. Results of the SVM-classifier [Adopted from Peter Schultes at el.]

	News& Politics	Comedy	Shows	Sports	Science & Technology	Gaming	People &Blogs	Films &Music	Animation	Entertainment	Pets & Animals
Precision	1.00	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Recall	1.00	1.00	1.00	1.00	0.67	0.67	0.89	1.00	1.00	1.00	1.00
F-Score	1.00	0.93	1.00	1.00	0.80	0.80	0.94	1.00	1.00	1.00	1.00

Figure 5: SVM - classifier table. Font: https://arxiv.org/ftp/arxiv/papers/1511/1511.09142.pdf

2. Study Cases Other Music Videos

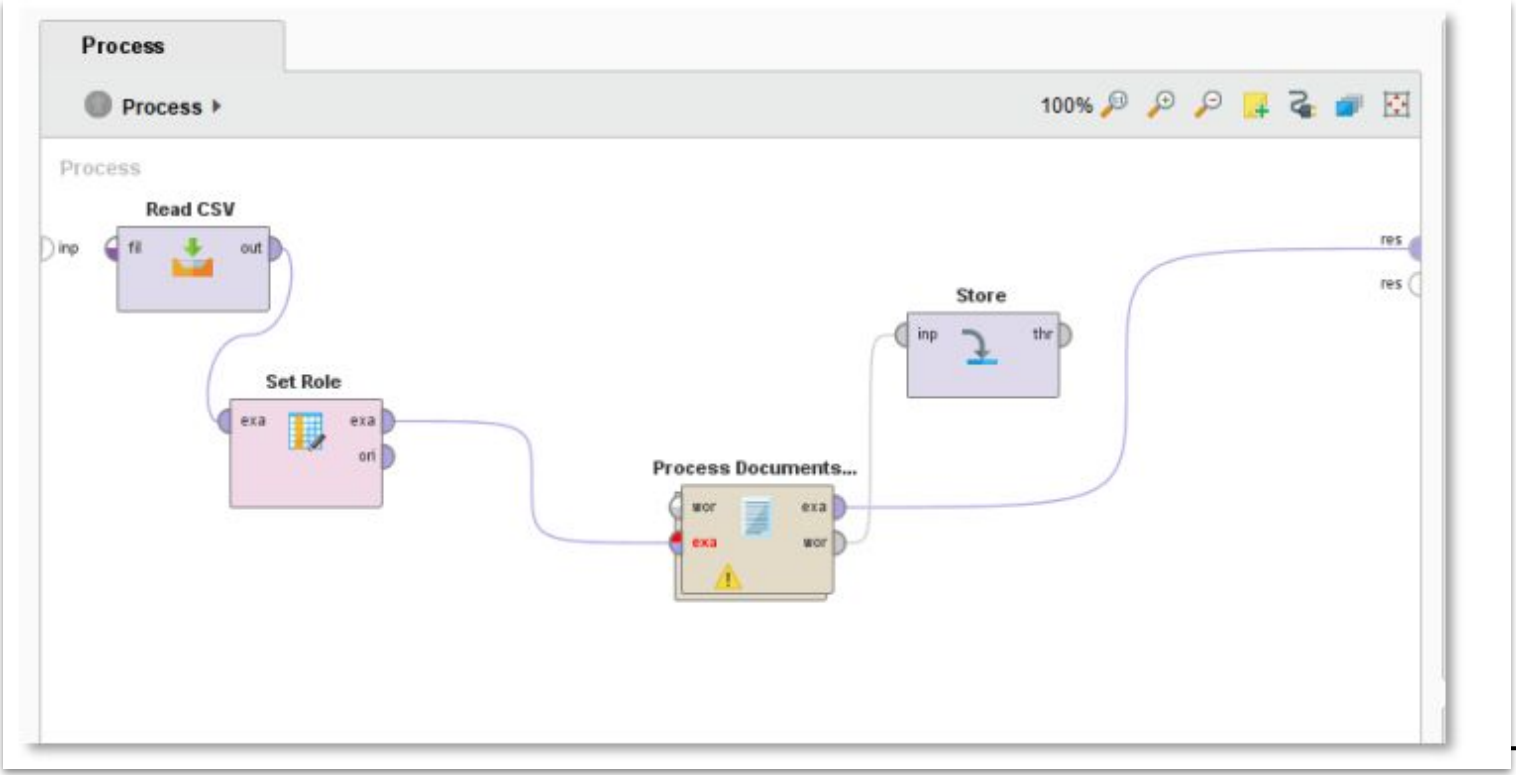
VIDEO	NUMBER OF VISITS	NUMBER OF COMMENTS	NUMBER OF LIKES	NUMBER OF DISLIKES
***Vuelve* (ft. Beret)**	96,954,990	37,456	1 M	27 K
***Ya No Tiene Novio* (ft. Mau y Ricky)**	322,077,837	41,451	1.2 M	77 K
***My Only One* (English Version *No Hay Nadie Más*, ft. Isabela Moner)**	27,431,390	6,250	157 K	3.7 K
***Robarte Un Beso* (featuring with Carlos Vives)**	975,066,820	83,701	2.6 M	193 K
***A Partir De Hoy* (featuring with David Bisbal)**	165,085,494	20,080	809 K	37 K

Table 2: Analyzed videos, with number of visits, number of comments, number of likes and dislikes on November 18, 2018. Investigated by Candida Rodriguez.

2. Study Cases Other Music Videos

ASPECTS	*Vuelve* (ft. Beret)	*Ya No Tiene Novio* (ft. Mau y Ricky)	*My Only One* (English Version *No Hay Nadie Más*, ft. Isabela Moner)	*Robarte Un Beso* (featuring with Carlos Vives)	*A Partir De Hoy* (featuring with David Bisbal)
Total comments from YouTube API	30,876	34,274	5,428	69,339	15,428
Language of the song	Spanish	Spanish	English/Spanish	Spanish	Spanish
Languages detected on comments	es (11,418) en (387) pt (1,329) Unknown (17,742)	es (8,693) en (521) pt (1,366) Unknown (23,694)	es (1,520) en (385) pt (195) Unknown (3,328)	es (20,951) en (1,222) pt (2,852) Unknown (44,314)	es (4,165) en (322) pt (652) Unknown (10,289)

3. Classification Data and Results



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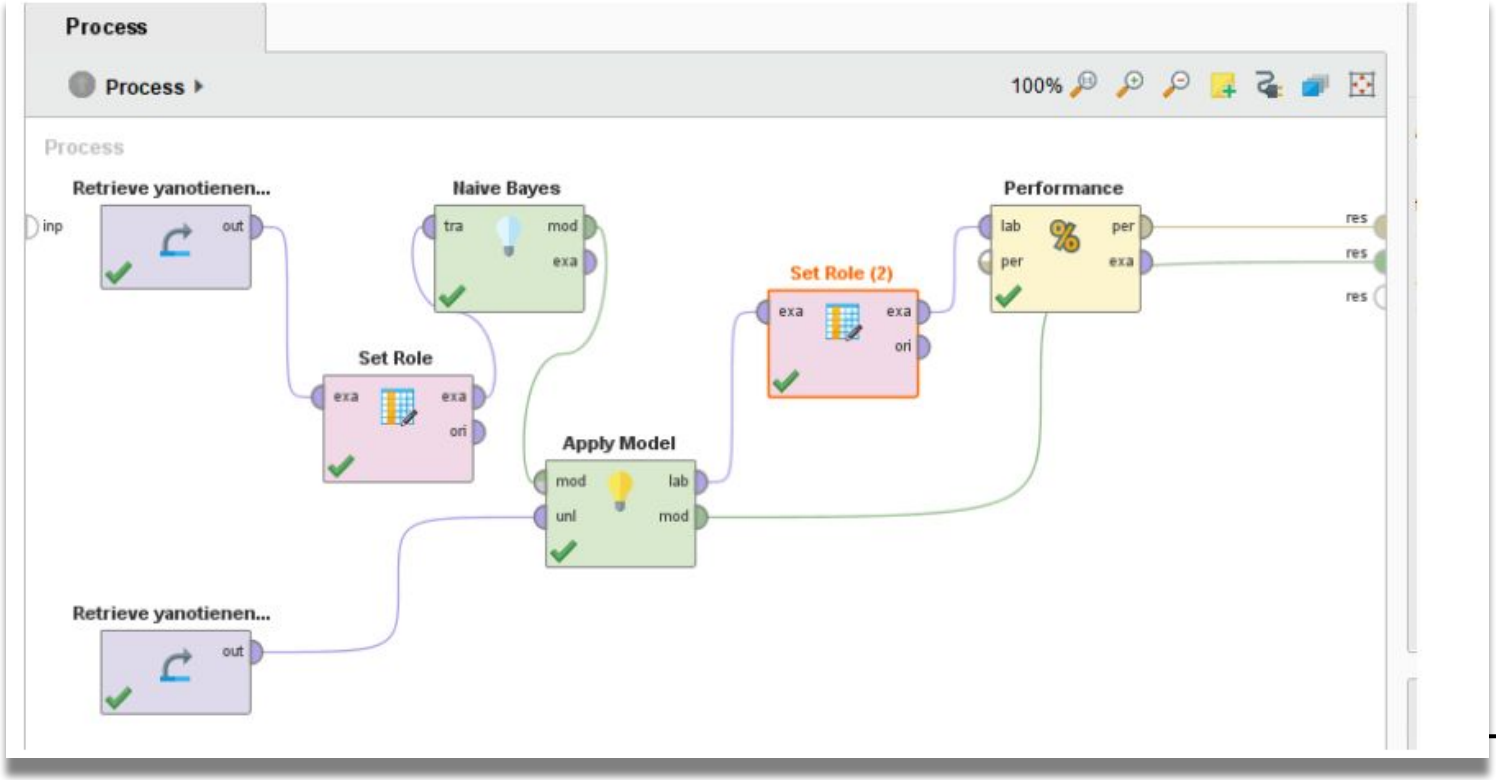

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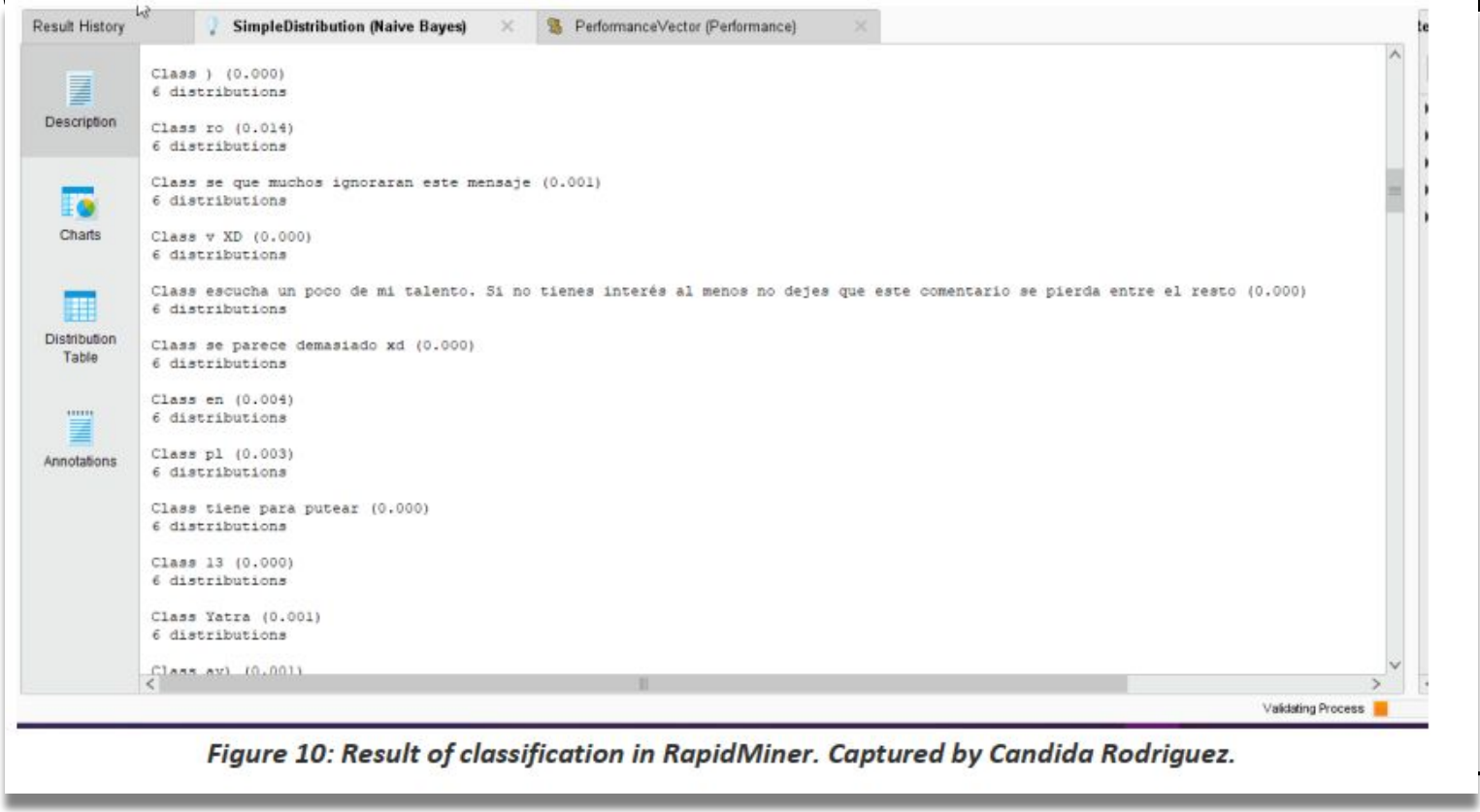

Figure 10: Result of classification in RapidMiner. Captured by Candida Rodriguez.

4. Conclusion

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Naive Bayes Classifier

Svm Classifier

TO BE CONTINUED...

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