Output Tables INF1340

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2024-08-11

Sentiment Analysis Data

```
library(readxl)
sa_scores <- read_excel("C:/Users/Owner/Desktop/INF1340/Final Project/sa_scores.xlsx")
```

```
## New names:
## * `` -> `...1`
## * `` -> `...2`
```

```
sa_scores
```

```
## # A tibble: 6 x 11
##   ...1    ...2 `Translation Type` Textblob Sentiment Po~1 Textblob Sentiment S~2
##   <chr>  <dbl> <chr>                                <dbl>                  <dbl>
## 1 Poem 1     0 Human                               0.0994                 0.494
## 2 <NA>       1 Machine                             0.175                  0.510
## 3 Poem 2     0 Human                               0.131                  0.416
## 4 <NA>       1 Machine                             0.129                  0.463
## 5 Poem 3     0 Human                               0.277                  0.580
## 6 <NA>       1 Machine                             0.206                  0.500
## # i abbreviated names: 1: `Textblob Sentiment Polarity Score`,
## #   2: `Textblob Sentiment Subjectivity Score`
## # i 6 more variables: `Naive Bayes Analyzer Positive Score` <dbl>,
## #   `Naive Bayes Analyzer Negative Score` <dbl>, `Vader Analysis Pos` <dbl>,
## #   `Vader Analysis Neg` <dbl>, `Vader Analysis Neutral` <dbl>,
## #   `Vader Analysis Compound` <dbl>
```

```
# table for sentiment Analysis Data
knitr::kable(sa_scores,
      booktabs = TRUE,
      "pipe",
      digits = 4,
      col.names = c("Poem Number", "Hot Encoded", "Translation Type",
                    "TextBlob Sentiment Polarity Score", "TextBlob Sentiment Subjectivity Score",
                    "Naive Bayes Analyzer Positive Score", "Naive Bayes Analyzer Negative Score",
                    "Vader Analysis Positive Sentiment Score", "Vader Analysis Negative Sentiment Score
                    "Vader Analysis Neutral Sentiment Score", "Vader Analysis Compound Sentiment Score"
      linesep = "")
```

Poem Number	Hot Encoded	Translation Type	TextBlob Sentiment Polarity Score	TextBlob Sentiment Subjectivity Score	Naive Bayes Analyzer Positive Score	Naive Bayes Analyzer Negative Score	Vader Analysis Positive Sentiment Score	Vader Analysis Negative Sentiment Score	Vader Analysis Neutral Sentiment Score	Vader Analysis Compound Sentiment Score
Poem 1	0	Human	0.0994	0.4937	1.0000	0e+00	0.103	0.055	0.841	0.8652
NA	1	Machine	0.1750	0.5095	1.0000	0e+00	0.118	0.048	0.834	0.9948
Poem 2	0	Human	0.1312	0.4157	1.0000	0e+00	0.101	0.058	0.841	0.9451
NA	1	Machine	0.1292	0.4633	1.0000	0e+00	0.135	0.084	0.781	0.9975
Poem 3	0	Human	0.2769	0.5804	0.9998	2e-04	0.149	0.121	0.730	0.9287
NA	1	Machine	0.2056	0.4997	0.9999	1e-04	0.159	0.110	0.732	0.9967

```
library(readxl)
sa_scores_long <- read_excel("C:/Users/Owner/Desktop/INF1340/Final Project/sa_scores_long.xlsx")
```

```
## New names:
## * `` -> `...1`
```

```
sa_scores_long
```

```
## # A tibble: 36 x 5
##     ...1 `Translation Type` `Poem Number` `NLTK Tool`     `Sentiment Tool Score`
##    <dbl> <chr>              <chr>         <chr>                             <dbl>
##  1     0 Human              Poem 1        Textblob Senti~                  0.0994
##  2     1 Machine            Poem 1        Textblob Senti~                  0.175
##  3     2 Human              Poem 2        Textblob Senti~                  0.131
##  4     3 Machine            Poem 2        Textblob Senti~                  0.129
##  5     4 Human              Poem 3        Textblob Senti~                  0.277
##  6     5 Machine            Poem 3        Textblob Senti~                  0.206
##  7     6 Human              Poem 1        Textblob Senti~                  0.494
##  8     7 Machine            Poem 1        Textblob Senti~                  0.510
##  9     8 Human              Poem 2        Textblob Senti~                  0.416
## 10     9 Machine            Poem 2        Textblob Senti~                  0.463
## # i 26 more rows
```

Tables and Summary Stats

```
# table for Sentiment df_long
knitr::kable(sa_scores_long,
      booktabs = TRUE,
      "pipe",
      digits = 4,
      col.names = c("ID", "Translation Type", "Poem Number", "NLTK Tool", "Sentiment Analysis Score"),
      linesep = "")
```

ID	Translation Type	Poem Number	NLTK Tool	Sentiment Analysis Score
0	Human	Poem 1	Textblob Sentiment Polarity Score	0.0994
1	Machine	Poem 1	Textblob Sentiment Polarity Score	0.1750
2	Human	Poem 2	Textblob Sentiment Polarity Score	0.1312
3	Machine	Poem 2	Textblob Sentiment Polarity Score	0.1292
4	Human	Poem 3	Textblob Sentiment Polarity Score	0.2769
5	Machine	Poem 3	Textblob Sentiment Polarity Score	0.2056
6	Human	Poem 1	Textblob Sentiment Subjectivity Score	0.4937
7	Machine	Poem 1	Textblob Sentiment Subjectivity Score	0.5095
8	Human	Poem 2	Textblob Sentiment Subjectivity Score	0.4157
9	Machine	Poem 2	Textblob Sentiment Subjectivity Score	0.4633
10	Human	Poem 3	Textblob Sentiment Subjectivity Score	0.5804
11	Machine	Poem 3	Textblob Sentiment Subjectivity Score	0.4997
12	Human	Poem 1	Vader Analysis Pos	0.1030
13	Machine	Poem 1	Vader Analysis Pos	0.1180
14	Human	Poem 2	Vader Analysis Pos	0.1010
15	Machine	Poem 2	Vader Analysis Pos	0.1350
16	Human	Poem 3	Vader Analysis Pos	0.1490
17	Machine	Poem 3	Vader Analysis Pos	0.1590
18	Human	Poem 1	Vader Analysis Neutral	0.8410
19	Machine	Poem 1	Vader Analysis Neutral	0.8340
20	Human	Poem 2	Vader Analysis Neutral	0.8410
21	Machine	Poem 2	Vader Analysis Neutral	0.7810
22	Human	Poem 3	Vader Analysis Neutral	0.7300
23	Machine	Poem 3	Vader Analysis Neutral	0.7320
24	Human	Poem 1	Vader Analysis Neg	0.0550
25	Machine	Poem 1	Vader Analysis Neg	0.0480
26	Human	Poem 2	Vader Analysis Neg	0.0580
27	Machine	Poem 2	Vader Analysis Neg	0.0840
28	Human	Poem 3	Vader Analysis Neg	0.1210
29	Machine	Poem 3	Vader Analysis Neg	0.1100
30	Human	Poem 1	Vader Analysis Compound	0.8652
31	Machine	Poem 1	Vader Analysis Compound	0.9948
32	Human	Poem 2	Vader Analysis Compound	0.9451
33	Machine	Poem 2	Vader Analysis Compound	0.9975
34	Human	Poem 3	Vader Analysis Compound	0.9287
35	Machine	Poem 3	Vader Analysis Compound	0.9967

```
sa_scores_avg <-data.frame(
  translation_type = c("Human","Machine"),
  textblob_sentiment_polarity_score = c(0.169164, 0.169907),
  textblob_sentiment_subjectivity_score = c(0.496595, 0.490850),
  vader_analysis_pos = c(0.117667, 0.137333),
  vader_analysis_neutral = c(0.804000, 0.782333),
  vader_analysis_neg = c(0.078000, 0.080667),
  vader_analysis_compound = c(0.913000, 0.996333)
)
sa_scores_avg
```

```
##   translation_type textblob_sentiment_polarity_score
## 1            Human                          0.169164
```

```
## 2          Machine                          0.169907
##   textblob_sentiment_subjectivity_score vader_analysis_pos
## 1                              0.496595           0.117667
## 2                              0.490850           0.137333
##   vader_analysis_neutral vader_analysis_neg vader_analysis_compound
## 1               0.804000           0.078000                0.913000
## 2               0.782333           0.080667                0.996333
```

```
# table for Sentiment df_averages
knitr::kable(sa_scores_avg,
      booktabs = TRUE,
      "pipe",
      digits = 4,
      col.names = c("Translation Type",
                    "TextBlob Sentiment Polarity Score", "TextBlob Sentiment Subjectivity Score","Vader
                    "Vader Analysis Neutral Sentiment Score", "Vader Analysis Compound Sentiment Score"
      linesep = "")
```

Translation Type	TextBlob Sentiment Polarity Score	TextBlob Sentiment Subjectivity Score	Vader Analysis Positive Sentiment Score	Vader Analysis Negative Sentiment Score	Vader Analysis Neutral Sentiment Score	Vader Analysis Compound Sentiment Score
Human	0.1692	0.4966	0.1177	0.8040	0.0780	0.9130
Machine	0.1699	0.4908	0.1373	0.7823	0.0807	0.9963