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1 C:\Users\270708326\PycharmProjects\PythonProject\Sentiment\.venv\Scripts\python.exe C:\Users\
  270708326\PycharmProjects\PythonProject\Sentiment\adv_deep_learning.py
2 PyTorch Version: 2.8.0+cpu
3 CUDA Available: False
4 Loading data...
5 Loaded 9386 reviews
6
7 =====
8 COMPLETE DEEP LEARNING SENTIMENT ANALYSIS PIPELINE
9 =====
10
11 =====
12 METHOD 3: ENSEMBLE SENTIMENT ANALYSIS
13 =====
14
15 Available sentiment methods: ['vader_sentiment', 'textblob_sentiment', 'roberta_sentiment']
16
17 Calculating ensemble scores...
18 Ensemble weights: {'vader_encoded': 0.23076923076923078, 'textblob_encoded': 0.23076923076923078
  , 'roberta_encoded': 0.5384615384615385}
19
20 Ensemble Sentiment Distribution:
21 ensemble_sentiment
22 Negative      5191
23 Positive      2912
24 Neutral       1283
25 Name: count, dtype: int64
26
27 Ensemble Accuracy vs Ground Truth: 76.75%
28
29 Comparison of All Available Methods:
30
31 Accuracy Comparison:
32          0
33 VADER      0.5462
34 TEXTBLOB   0.4489
35 ROBERTA    0.7912
36 ENSEMBLE   0.7675
37
38 =====
39 GENERATING VISUALIZATIONS
40 =====
41
42 ERROR: File '                                reviewId ... ensemble_sentiment
43 0      005447b5-7160-440d-8e35-9043944b61bf ...      Positive
44 1      44c57a8a-adb9-4ac3-b23c-5ec40017350b ...      Negative
45 2      2f5fe9e5-348b-42e9-a8f9-d6c2c7fa1f7e ...      Negative
46 3      d1ecc4d8-a016-4daa-9505-13cd5cbefcc6 ...      Positive
47 4      9a374274-cf27-4e4c-8643-fd51d07ae98f ...      Positive
48 ...      ...      ...
49 9381   df5fc596-b5f5-45e4-b1a1-33d8531c0663 ...      Positive
50 9382   16f3113f-0718-4439-9dd0-0abdeada85d4 ...      Positive
51 9383   15ddd6e2-af8c-4386-b242-70492f903194 ...      Positive
52 9384   404aa772-fba6-4787-b4ee-75e72cbb6f18 ...      Positive
53 9385   1700975a-875d-49f3-8ef6-4571d8e06bac ...      Positive
54
55 [9386 rows x 38 columns]' not found!
56 Current directory: C:\Users\270708326\PycharmProjects\PythonProject\Sentiment
57 Please ensure the file exists before running visualizations.
58
59 ERROR: File '                                reviewId ... ensemble_sentiment
60 0      005447b5-7160-440d-8e35-9043944b61bf ...      Positive
61 1      44c57a8a-adb9-4ac3-b23c-5ec40017350b ...      Negative
62 2      2f5fe9e5-348b-42e9-a8f9-d6c2c7fa1f7e ...      Negative
63 3      d1ecc4d8-a016-4daa-9505-13cd5cbefcc6 ...      Positive
64 4      9a374274-cf27-4e4c-8643-fd51d07ae98f ...      Positive
65 ...      ...      ...
66 9381   df5fc596-b5f5-45e4-b1a1-33d8531c0663 ...      Positive
67 9382   16f3113f-0718-4439-9dd0-0abdeada85d4 ...      Positive

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68 9383 15ddd6e2-af8c-4386-b242-70492f903194 ... Positive
69 9384 404aa772-fba6-4787-b4ee-75e72cbb6f18 ... Positive
70 9385 1700975a-875d-49f3-8ef6-4571d8e06bac ... Positive
71
72 [9386 rows x 38 columns]' not found!
73
74
75 Results saved to 'one_nz_with_deep_learning_sentiment.csv'
76
77 =====
78 ANALYSIS COMPLETE!
79 =====
80
81 Generated files:
82 1. one_nz_with_deep_learning_sentiment.csv
83 2. sentiment_comparison.png
84 3. confidence_distribution.png
85
86 Process finished with exit code 0
87
```