

```
1 E:\Desktop\000\000\venv\Scripts\python.exe "D:\  
Bristol course\Data Science Dissertation\ExpBERT lab  
and thesis\BERT-IE-main\BERT-IE-main\Active Learning  
Strategies.py"  
2 us_add_1_818  
3 len test: 1605  
4 len train*val 3211  
5 len unxep 11241  
6 len train 2408  
7 len val 803  
8 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
93cc8acbd5e1e21/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
bcc7ec513e1...  
9 Downloading data files: 100%|██████████| 1/1 [00:00<  
00:00, 996.75it/s]  
10 Extracting data files: 100%|██████████| 1/1 [00:00<00  
:00, 3.12it/s]  
11 0%|          | 0/1 [00:00<?, ?it/s]Dataset csv  
downloaded and prepared to C:/Users/admin/.cache/  
huggingface/datasets/csv/default-93cc8acbd5e1e21/0.  
.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
bcc7ec513e1. Subsequent calls will reuse this data.  
12 100%|██████████| 1/1 [00:00<00:00, 8.93it/s]  
13 11241  
14 torch.Size([11241, 27])  
15 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]  
16 Extracting data files: 100%|██████████| 1/1 [00:00<00  
:00, 105.30it/s]  
17 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
bb949172df1a7ce7/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
bcc7ec513e1...  
18 100%|██████████| 1/1 [00:00<00:00, 66.64it/s]  
19 Dataset csv downloaded and prepared to C:/Users/admin  
.cache/huggingface/datasets/csv/default-  
bb949172df1a7ce7/0.0.0/
```

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19      6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
      bcc7ec513e1. Subsequent calls will reuse this data.  
20 Downloading data files: 100%|██████████| 1/1 [00:00  
      <?, ?it/s]  
21 Downloading and preparing dataset csv/default to C:/  
      Users/admin/.cache/huggingface/datasets/csv/default-  
      4747b058e314cbc9/0.0.0/  
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
      bcc7ec513e1...  
22 Extracting data files: 100%|██████████| 1/1 [00:00<00  
      :00, 110.50it/s]  
23 100%|██████████| 1/1 [00:00<00:00, 52.30it/s]  
24 Dataset csv downloaded and prepared to C:/Users/admin/  
      /.cache/huggingface/datasets/csv/default-  
      4747b058e314cbc9/0.0.0/  
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc853  
      bcc7ec513e1. Subsequent calls will reuse this data.  
25 noexp_df.shape[0] last 11241  
26 unexplained dataset length is:  
27 11241  
28 embedding begin  
29 trian and val dataset length: 21060  
30 us_add_1_818  
31 us_add_1_818  
32 us_add_1_818  
33 us_add_1_818  
34 us_add_1_818  
35 us_add_1_818  
36 us_add_1_818  
37 us_add_1_818  
38 234.0  
39 ./embeddings/NEW_bertie_embeddings_textattack/bert-  
      base-uncased-MNLI_subset_1.pt  
40 Downloading data files: 100%|██████████| 1/1 [00:00  
      <?, ?it/s]  
41 Extracting data files: 100%|██████████| 1/1 [00:00<00  
      :00, 1992.54it/s]  
42 0%|          | 0/1 [00:00<?, ?it/s]Downloading and  
      preparing dataset csv/default to C:/Users/admin/.  
      cache/huggingface/datasets/csv/default-
```

```
42 ba164b778eb30a12/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1...
43 Dataset csv downloaded and prepared to C:/Users/admin
  /.cache/huggingface/datasets/csv/default-
  ba164b778eb30a12/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1. Subsequent calls will reuse this data.
44 100%|██████████| 1/1 [00:00<00:00, 90.91it/s]
45 test len 14445
46 Downloading and preparing dataset csv/default to C:/_
  Users/admin/.cache/huggingface/datasets/csv/default-
  191971e0b8bf84bd/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1...
47 Downloading data files: 100%|██████████| 1/1 [00:00
  <?, ?it/s]
48 Extracting data files: 100%|██████████| 1/1 [00:00<00
  :00, 153.85it/s]
49 100%|██████████| 1/1 [00:00<00:00, 71.39it/s]
50 Dataset csv downloaded and prepared to C:/Users/admin
  /.cache/huggingface/datasets/csv/default-
  191971e0b8bf84bd/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1. Subsequent calls will reuse this data.
51 preprocess_samples begin ...
52 uncertainty shape: 1530
53 ./test_embeddings/NEW_bertie_embeddings_textattack/
  bert-base-uncased-MNLI_subset_1.pt
54 Downloading data files: 100%|██████████| 1/1 [00:00
  <?, ?it/s]
55 Extracting data files: 100%|██████████| 1/1 [00:00<00
  :00, 467.33it/s]
56 0%|          | 0/1 [00:00<?, ?it/s]Downloading and
  preparing dataset csv/default to C:/Users/admin/ .
  cache/huggingface/datasets/csv/default-
  ca5df4ccf35536d3/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1...
57 Dataset csv downloaded and prepared to C:/Users/admin
  /.cache/huggingface/datasets/csv/default-
```

```
57 ca5df4ccf35536d3/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1. Subsequent calls will reuse this data.
58 100%|██████████| 1/1 [00:00<00:00, 100.00it/s]
59 val len 7227
60 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-c4c95bcb1a00f9cd/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1...
61 Downloading data files: 100%|██████████| 1/1 [00:00<00:00, 1000.07it/s]
62 Extracting data files: 100%|██████████| 1/1 [00:00<00:00, 136.54it/s]
63 100%|██████████| 1/1 [00:00<00:00, 110.41it/s]
64 Dataset csv downloaded and prepared to C:/Users/admin/.cache/huggingface/datasets/csv/default-c4c95bcb1a00f9cd/0.0.0/
  6954658bab30a358235fa864b05cf819af0e179325c740e4bc853
  bcc7ec513e1. Subsequent calls will reuse this data.
65 preprocess_samples begin ...
66 uncertainty shape: 720
67 ./val_embeddings/NEW_bertie_embeddings_textattack/
  bert-base-uncased-MNLI_subset_1.pt
68 classify begin
69 2408
70   0%|          | 0/20 [00:00<?, ?it/s]us_add_1_818
71   5%|█         | 1/20 [00:04<01:20, 4.22s/it]
  us_add_1_818
72 236it [00:04, 135.24it/s]us_add_1_818
73 us_add_1_818
74 us_add_1_818
75 us_add_1_818
76 569it [00:14, 68.04it/s]us_add_1_818
77 us_add_1_818
78 us_add_1_818
79 us_add_1_818
80 804it [00:24, 43.11it/s]us_add_1_818
81 us_add_1_818
82 us_add_1_818
83 880it [00:33, 19.50it/s]us_add_1_818
```

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84 1104it [00:33, 53.68it/s]us_add_1_818
85 us_add_1_818
86 us_add_1_818
87 1173it [00:42, 20.23it/s]us_add_1_818
88 1393it [00:43, 55.84it/s]us_add_1_818
89 us_add_1_818
90 us_add_1_818
91 1466it [00:52, 20.71it/s]us_add_1_818
92 1697it [00:52, 59.42it/s]us_add_1_818
93 us_add_1_818
94 us_add_1_818
95 us_add_1_818
96 2031it [01:02, 63.27it/s]us_add_1_818
97 us_add_1_818
98 us_add_1_818
99 us_add_1_818
100 2269it [01:12, 42.06it/s]us_add_1_818
101 us_add_1_818
102 us_add_1_818
103 2345it [01:21, 19.54it/s]us_add_1_818
104 2629it [01:21, 69.56it/s]us_add_1_818
105 us_add_1_818
106 us_add_1_818
107 us_add_1_818
108 2854it [01:31, 42.35it/s]us_add_1_818
109 us_add_1_818
110 us_add_1_818
111 2931it [01:40, 19.07it/s]us_add_1_818
112 3142it [01:41, 50.78it/s]us_add_1_818
113 us_add_1_818
114 us_add_1_818
115 3224it [01:50, 20.38it/s]us_add_1_818
116 3479it [01:50, 69.14it/s]us_add_1_818
117 us_add_1_818
118 us_add_1_818
119 us_add_1_818
120 3781it [02:02, 76.03it/s]us_add_1_818
121 us_add_1_818
122 us_add_1_818
123 us_add_1_818
124 4044it [02:13, 49.30it/s]us_add_1_818
```

```
125 us_add_1_818
126 us_add_1_818
127 us_add_1_818
128 4348it [02:22, 56.34it/s]us_add_1_818
129 us_add_1_818
130 us_add_1_818
131 us_add_1_818
132 4667it [02:32, 60.16it/s]us_add_1_818
133 us_add_1_818
134 us_add_1_818
135 us_add_1_818
136 4910it [02:41, 43.85it/s]us_add_1_818
137 us_add_1_818
138 us_add_1_818
139 4982it [02:50, 19.52it/s]us_add_1_818
140 5195it [02:51, 51.54it/s]us_add_1_818
141 us_add_1_818
142 us_add_1_818
143 5275it [03:00, 20.72it/s]us_add_1_818
144 5566it [03:00, 78.39it/s]us_add_1_818
145 us_add_1_818
146 us_add_1_818
147 us_add_1_818
148 5792it [03:10, 42.93it/s]us_add_1_818
149 us_add_1_818
150 epoch number 19
151 us_add_1_818
152 us_add_1_818
153 us_add_1_818
154 us_add_1_818
155 global t is : 0
156 test epoch results {'accuracy': 0.4666666666666667
, 'f1_weighted': 0.38275704654023945, 'f1_macro': 0.
2584988681096172, 'f1': array([0.77806789, 0
. , 0. , 0.08333333, 0.01843318,
157 0. , 0.40715884, 0.56652361, 0.
47297297]), 'precision': array([0.79255319, 0
. , 0. , 0.3 , 0.66666667,
158 0. , 0.33333333, 0.41860465, 0.7
]), 'recall': array([0.76410256, 0.
, 0. , 0.0483871 , 0.00934579,
```

```
159          0.          , 0.52298851, 0.87610619, 0.
35714286])}
160 val epoch results {'accuracy': 0.5805555555555556, 'f1_weighted': 0.49955475314849, 'f1_macro': 0.
27442047508934514, 'f1': array([0.8115942 , 0
.          , 0.          , 0.04878049, 0.05555556,
161          0.          , 0.5          , 0.68176101, 0.
37209302]), 'precision': array([0.82352941, 0
.          , 0.          , 0.4          , 1.
, 0.
64864865]), 'recall': array([0.8          , 0
.          , 0.02597403, 0.02857143,
163          0.          , 0.48          , 0.93771626, 0.
26086957])}
164 5860it [03:25, 28.50it/s]
165 uncertainty len embedding 11241
166 MLP_1h(
167     (l1): Linear(in_features=27, out_features=100,
bias=True)
168     (l2): Linear(in_features=100, out_features=9, bias
=True)
169 )
170 ['someone is confirm dead death die or killed
injured or hurt\n']
171 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-
db11d188e82f7d7b/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
172 Downloading data files: 100%|██████████| 1/1 [00:00<
00:00, 971.35it/s]
173 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 143.41it/s]
174 100%|██████████| 1/1 [00:00<00:00, 77.30it/s]
175 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
db11d188e82f7d7b/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
176 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
```

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177 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
5ddb589431f07be4/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
178 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 142.86it/s]  
179 100%|██████████| 1/1 [00:00<00:00, 77.04it/s]  
180 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
5ddb589431f07be4/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
181 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
182 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
b9c116b443599e58/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
183 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 100.00it/s]  
184 100%|██████████| 1/1 [00:00<00:00, 100.00it/s]  
185 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
b9c116b443599e58/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
186 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
187 Extracting data files: 0% | 0/1 [00:00  
<, ?it/s] Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-de136e4901913784/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
188 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 10.54it/s]  
189 100%|██████████| 1/1 [00:00<00:00, 90.91it/s]  
190 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-
```

```
190 de136e4901913784/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
191 t is : 1
192 addlen is: 500
193 noexp_df.shape[0] last 10741
194 unexplained dataset length is:
195 10741
196 embedding begin
197 trian and val dataset length: 28800
198 us_add_1_818
199 us_add_1_818
200 us_add_1_818
201 us_add_1_818
202 us_add_1_818
203 us_add_1_818
204 us_add_1_818
205 us_add_1_818
206 288.0
207 ./embeddings/NEW_bertie_embeddings_textattack/bert-
    base-uncased-MNLI_subset_1.pt
208 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ba164b778eb30a12/0.
    0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1)
209 100%|██████████| 1/1 [00:00<00:00, 945.51it/s]
210 test len 16050
211 Downloading data files: 100%|██████████| 1/1 [00:00
    <?, ?it/s]
212 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 125.03it/s]
213 Generating train split: 0 examples [00:00, ?
    examples/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-02c73b1805a58628/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1...
214 100%|██████████| 1/1 [00:00<00:00, 76.89it/s]
215 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
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```
215 02c73b1805a58628/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
216 preprocess_samples begin ...
217 uncertainty shape: 1530
218 ./test_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
219 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ca5df4ccf35536d3/0.
    0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1)
220 100%|██████████| 1/1 [00:00<00:00, 956.08it/s]
221 val len 8030
222 Downloading data files: 100%|██████████| 1/1 [00:00<
    00:00, 997.93it/s]
223 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 142.85it/s]
224 Downloading and preparing dataset csv/default to C:/
    Users/admin/.cache/huggingface/datasets/csv/default-
    6553915c4ab2068a/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1...
225 100%|██████████| 1/1 [00:00<00:00, 99.98it/s]
226 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    6553915c4ab2068a/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
227 preprocess_samples begin ...
228 uncertainty shape: 720
229 ./val_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
230 classify begin
231 2908
232     0%|          | 0/20 [00:00<?, ?it/s]us_add_1_818
233 us_add_1_818
234 299it [00:07, 92.56it/s]us_add_1_818
235 us_add_1_818
236 us_add_1_818
237 361it [00:20, 13.72it/s]us_add_1_818
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238 687it [00:21, 80.41it/s]us_add_1_818
239 us_add_1_818
240 us_add_1_818
241 us_add_1_818
242 1000it [00:34, 48.56it/s]us_add_1_818
243 us_add_1_818
244 us_add_1_818
245 us_add_1_818
246 1407it [00:47, 65.03it/s]us_add_1_818
247 us_add_1_818
248 us_add_1_818
249 1441it [01:00, 14.51it/s]us_add_1_818
250 1769it [01:00, 67.25it/s]us_add_1_818
251 us_add_1_818
252 us_add_1_818
253 us_add_1_818
254 2105it [01:13, 49.86it/s]us_add_1_818
255 us_add_1_818
256 us_add_1_818
257 us_add_1_818
258 2513it [01:26, 64.40it/s]us_add_1_818
259 us_add_1_818
260 us_add_1_818
261 us_add_1_818
262 2832it [01:40, 46.33it/s]us_add_1_818
263 us_add_1_818
264 us_add_1_818
265 2880it [01:50, 46.33it/s]us_add_1_818
266 3168it [01:53, 55.73it/s]us_add_1_818
267 us_add_1_818
268 us_add_1_818
269 us_add_1_818
270 3539it [02:06, 62.02it/s]us_add_1_818
271 us_add_1_818
272 us_add_1_818
273 us_add_1_818
274 3917it [02:19, 62.45it/s]us_add_1_818
275 us_add_1_818
276 us_add_1_818
277 3961it [02:32, 13.99it/s]us_add_1_818
278 4258it [02:33, 60.33it/s]us_add_1_818
```

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279 us_add_1_818
280 us_add_1_818
281 us_add_1_818
282 4657it [02:46, 67.04it/s]us_add_1_818
283 us_add_1_818
284 us_add_1_818
285 us_add_1_818
286 4967it [02:59, 47.68it/s]us_add_1_818
287 us_add_1_818
288 us_add_1_818
289 5040it [03:10, 47.68it/s]us_add_1_818
290 5346it [03:12, 61.43it/s]us_add_1_818
291 us_add_1_818
292 us_add_1_818
293 us_add_1_818
294 5751it [03:25, 67.80it/s]us_add_1_818
295 us_add_1_818
296 us_add_1_818
297 us_add_1_818
298 6068it [03:38, 46.62it/s]us_add_1_818
299 us_add_1_818
300 us_add_1_818
301 6120it [03:50, 46.62it/s]us_add_1_818
302 6476it [03:51, 76.99it/s]us_add_1_818
303 us_add_1_818
304 us_add_1_818
305 us_add_1_818
306 6766it [04:04, 45.46it/s]us_add_1_818
307 us_add_1_818
308 us_add_1_818
309 us_add_1_818
310 7198it [04:18, 79.79it/s]us_add_1_818
311 us_add_1_818
312 epoch number 19
313 us_add_1_818
314 us_add_1_818
315 7200it [04:30, 79.79it/s]us_add_1_818
316 us_add_1_818
317 global t is : 1
318 test epoch results {'accuracy': 0.4849673202614379
, 'f1_weighted': 0.4162208893998704, 'f1_macro': 0.
```

```
318 2872015477127188, 'f1': array([0.81578947, 0
.           , 0.           , 0.11842105, 0.16733068,
319          0.           , 0.4223301 , 0.56959315, 0.
49134948]), 'precision': array([0.83783784, 0
.           , 0.           , 0.32142857, 0.56756757,
320          0.           , 0.36554622, 0.42044257, 0.
76344086]), 'recall': array([0.79487179, 0
.           , 0.           , 0.07258065, 0.09813084,
321          0.           , 0.5           , 0.88274336, 0.3622449
])}
322 val epoch results {'accuracy': 0.5819444444444445, 'f1_weighted': 0.5089395566177476, 'f1_macro': 0.
2946817911665092, 'f1': array([0.80769231, 0
.           , 0.           , 0.07228916, 0.21276596,
323          0.           , 0.5           , 0.67843632, 0.
38095238]), 'precision': array([0.81553398, 0
.           , 0.           , 0.5           , 0.41666667,
324          0.           , 0.55737705, 0.53373016, 0.
70588235]), 'recall': array([0.8           , 0
.           , 0.           , 0.03896104, 0.14285714,
325          0.           , 0.45333333, 0.93079585, 0.
26086957])}
326 uncertainty new embedding 10741
327 uncertainty len embedding 10741
328 MLP_1h(
329   (l1): Linear(in_features=30, out_features=100,
bias=True)
330   (l2): Linear(in_features=100, out_features=9, bias
=True)
331 )
332 7200it [04:33, 26.32it/s]
333 ['missing or lost or trapped was found or rescued
stranded stuck\n']
334 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
335 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 166.43it/s]
336 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-
5ffc4905f2e4c984/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
```

```
336 3bcc7ec513e1...
337 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
5ffc4905f2e4c984/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
338 100%|██████████| 1/1 [00:00<00:00, 99.42it/s]
339 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
340 Downloading and preparing dataset csv/default to C:/
Users/admin/.cache/huggingface/datasets/csv/default-
09ad7e574784f40c/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
341 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 143.29it/s]
342 100%|██████████| 1/1 [00:00<00:00, 66.68it/s]
343 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
09ad7e574784f40c/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
344 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
345 Downloading and preparing dataset csv/default to C:/
Users/admin/.cache/huggingface/datasets/csv/default-
b85c37bcbaaaa2cb/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
346 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 142.74it/s]
347 100%|██████████| 1/1 [00:00<00:00, 99.99it/s]
348 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
b85c37bcbaaaa2cb/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
349 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
350 Extracting data files: 0% | 0/1 [00:00
<, ?it/s]Downloading and preparing dataset csv/
```

```
350 default to C:/Users/admin/.cache/huggingface/
datasets/csv/default-ae315b60ba68b2cb/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
351 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 10.31it/s]
352 0%|          | 0/1 [00:00<?, ?it/s]Dataset csv
downloaded and prepared to C:/Users/admin/.cache/
huggingface/datasets/csv/default-ae315b60ba68b2cb/0.
0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
353 100%|██████████| 1/1 [00:00<00:00, 18.50it/s]
354 t is : 2
355 addlen is: 1000
356 noexp_df.shape[0] last 10241
357 unexplained dataset length is:
358 10241
359 embedding begin
360 trian and val dataset length: 36630
361 us_add_1_818
362 us_add_1_818
363 us_add_1_818
364 us_add_1_818
365 us_add_1_818
366 us_add_1_818
367 us_add_1_818
368 us_add_1_818
369 333.0
370 ./embeddings/NEW_bertie_embeddings_textattack/bert-
base-uncased-MNLI_subset_1.pt
371 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ba164b778eb30a12/0.
0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1)
372 100%|██████████| 1/1 [00:00<00:00, 83.33it/s]
373 test len 17655
374 Downloading data files: 100%|██████████| 1/1 [00:00
<?, ?it/s]
375 Extracting data files: 100%|██████████| 1/1 [00:00<
```

```
375 00:00, 166.66it/s]
376 Generating train split: 0 examples [00:00, ?
examples/s]Downloading and preparing dataset csv/
default to C:/Users/admin/.cache/huggingface/
datasets/csv/default-97d5c9f896fbab09/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
377 100%|██████████| 1/1 [00:00<00:00, 66.68it/s]
378 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
97d5c9f896fbab09/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
379 preprocess_samples begin ...
380 uncertainty shape: 1530
381 ./test_embeddings/NEW_bertie_embeddings_textattack/
bert-base-uncased-MNLI_subset_1.pt
382 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ca5df4ccf35536d3/0.
0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1)
383 100%|██████████| 1/1 [00:00<00:00, 100.00it/s]
384 val len 8833
385 Downloading data files: 100%|██████████| 1/1 [00:00
<?, ?it/s]
386 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 142.84it/s]
387 Generating train split: 0 examples [00:00, ?
examples/s]Downloading and preparing dataset csv/
default to C:/Users/admin/.cache/huggingface/
datasets/csv/default-669e7b7c34fe82ef/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
388 100%|██████████| 1/1 [00:00<00:00, 99.33it/s]
389 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
669e7b7c34fe82ef/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
390 preprocess_samples begin ...
```

```
391 uncertainty shape: 720
392 ./val_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
393 classify begin
394 3408
395 0%|          | 0/20 [00:00<?, ?it/s]us_add_1_818
396 us_add_1_818
397 395it [00:14, 82.55it/s]us_add_1_818
398 us_add_1_818
399 us_add_1_818
400 us_add_1_818
401 828it [00:28, 73.43it/s]us_add_1_818
402 us_add_1_818
403 us_add_1_818
404 us_add_1_818
405 1195it [00:41, 53.88it/s]us_add_1_818
406 us_add_1_818
407 us_add_1_818
408 1252it [00:54, 16.04it/s]us_add_1_818
409 1604it [00:54, 67.87it/s]us_add_1_818
410 us_add_1_818
411 us_add_1_818
412 us_add_1_818
413 2053it [01:08, 73.59it/s]us_add_1_818
414 us_add_1_818
415 us_add_1_818
416 us_add_1_818
417 2478it [01:21, 72.99it/s]us_add_1_818
418 us_add_1_818
419 us_add_1_818
420 us_add_1_818
421 2831it [01:34, 52.68it/s]us_add_1_818
422 us_add_1_818
423 us_add_1_818
424 us_add_1_818
425 3335it [01:47, 91.08it/s]us_add_1_818
426 us_add_1_818
427 us_add_1_818
428 us_add_1_818
429 3743it [02:00, 72.20it/s]us_add_1_818
430 us_add_1_818
```

```
431 us_add_1_818
432 us_add_1_818
433 4165it [02:13, 71.54it/s]us_add_1_818
434 us_add_1_818
435 us_add_1_818
436 4171it [02:27, 12.90it/s]us_add_1_818
437 4526it [02:27, 68.35it/s]us_add_1_818
438 us_add_1_818
439 us_add_1_818
440 us_add_1_818
441 4945it [02:40, 68.36it/s]us_add_1_818
442 us_add_1_818
443 us_add_1_818
444 us_add_1_818
445 5383it [02:54, 72.70it/s]us_add_1_818
446 us_add_1_818
447 us_add_1_818
448 5422it [03:07, 15.52it/s]us_add_1_818
449 5787it [03:07, 72.35it/s]us_add_1_818
450 us_add_1_818
451 us_add_1_818
452 us_add_1_818
453 6164it [03:20, 55.55it/s]us_add_1_818
454 us_add_1_818
455 us_add_1_818
456 us_add_1_818
457 6617it [03:34, 69.94it/s]us_add_1_818
458 us_add_1_818
459 us_add_1_818
460 6672it [03:44, 69.94it/s]us_add_1_818
461 7007it [03:47, 68.02it/s]us_add_1_818
462 us_add_1_818
463 us_add_1_818
464 us_add_1_818
465 7421it [04:00, 68.62it/s]us_add_1_818
466 us_add_1_818
467 us_add_1_818
468 us_add_1_818
469 7917it [04:14, 96.18it/s]us_add_1_818
470 us_add_1_818
471 us_add_1_818
```

```

472 7924it [04:26, 13.56it/s]us_add_1_818
473 8274it [04:27, 71.52it/s]us_add_1_818
474 us_add_1_818
475 epoch number 19
476 us_add_1_818
477 us_add_1_818
478 us_add_1_818
479 us_add_1_818
480 global t is : 2
481 test epoch results {'accuracy': 0.5261437908496732
, 'f1_weighted': 0.47638230758360484, 'f1_macro': 0.
3407524014248767, 'f1': array([0.82077922, 0
. , 0.07843137, 0.12903226, 0.52878465,
482 0. , 0.45333333, 0.58544304, 0.
47096774]), 'precision': array([0.83157895, 0
. , 1. , 0.32258065, 0.48627451,
483 0. , 0.53968254, 0.45566502, 0.
64035088]), 'recall': array([0.81025641, 0
. , 0.04081633, 0.08064516, 0.57943925,
484 0. , 0.3908046 , 0.81858407, 0.
37244898])}
485 val epoch results {'accuracy': 0.6013888888888889, 'f1_weighted': 0.5422693936076646, 'f1_macro': 0.
35755206911128, 'f1': array([0.81 , 0
. , 0.18181818, 0.11627907, 0.48837209,
486 0. , 0.54098361, 0.69816273, 0.
38235294]), 'precision': array([0.85263158, 0
. , 1. , 0.55555556, 0.41176471,
487 0. , 0.70212766, 0.56236786, 0.
59090909]), 'recall': array([0.77142857, 0
. , 0.1 , 0.06493506, 0.6
, 488 0. , 0.44 , 0.92041522, 0.2826087
])}
489 8340it [04:42, 29.54it/s]
490 uncertainty new embedding 10241
491 uncertainty len embedding 10241
492 MLP_1h(
493 (l1): Linear(in_features=33, out_features=100,
bias=True)
494 (l2): Linear(in_features=100, out_features=9, bias
=True)

```

```
495 )
496 ['people were displaced sent to shelters evacuated  
and relocated temporary\n']
497 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]
498 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 165.32it/s]
499 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-396ff825fe333464/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...
500 100%|██████████| 1/1 [00:00<00:00, 90.89it/s]
501 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
396ff825fe333464/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.
502 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]
503 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
e2aa9f05fb3719d9/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...
504 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 142.85it/s]
505 100%|██████████| 1/1 [00:00<00:00, 99.63it/s]
506 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
e2aa9f05fb3719d9/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.
507 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]
508 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 135.38it/s]
509 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
8ae3945872fc670b/0.0.0/
```

```
509 6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
510 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
8ae3945872fc670b/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
511 100%|██████████| 1/1 [00:00<00:00, 99.65it/s]  
512 Downloading data files: 100%|██████████| 1/1 [00:00<  
00:00, 997.93it/s]  
513 Extracting data files:  0%|          | 0/1 [00:00  
<, ?it/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-14fad177db683bc9/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
514 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 10.50it/s]  
515 100%|██████████| 1/1 [00:00<00:00, 83.57it/s]  
516 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
14fad177db683bc9/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
517 t is : 3  
518 addlen is: 1500  
519 noexp_df.shape[0] last 9741  
520 unexplained dataset length is:  
521 9741  
522 embedding begin  
523 trian and val dataset length: 46440  
524 us_add_1_818  
525 us_add_1_818  
526 us_add_1_818  
527 us_add_1_818  
528 us_add_1_818  
529 us_add_1_818  
530 us_add_1_818  
531 us_add_1_818  
532 387.0
```

```
533 ./embeddings/NEW_bertie_embeddings_textattack/bert-
base-uncased-MNLI_subset_1.pt
534 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ba164b778eb30a12/0.
0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1)
535 100%|██████████| 1/1 [00:00<00:00, 961.33it/s]
536 test len 19260
537 Downloading and preparing dataset csv/default to C:/_
Users/admin/.cache/huggingface/datasets/csv/default-
da02ca64b541221a/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
538 Downloading data files: 100%|██████████| 1/1 [00:00<
?, ?it/s]
539 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 111.11it/s]
540 100%|██████████| 1/1 [00:00<00:00, 71.42it/s]
541 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
da02ca64b541221a/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
542 preprocess_samples begin ...
543 uncertainty shape: 1530
544 ./test_embeddings/NEW_bertie_embeddings_textattack/
bert-base-uncased-MNLI_subset_1.pt
545 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ca5df4ccf35536d3/0.
0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1)
546 100%|██████████| 1/1 [00:00<00:00, 326.35it/s]
547 val len 9636
548 Downloading and preparing dataset csv/default to C:/_
Users/admin/.cache/huggingface/datasets/csv/default-
66dd2f8fed58c527/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
549 Downloading data files: 100%|██████████| 1/1 [00:00<
```

```
549 <?, ?it/s]
550 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 99.49it/s]
551 100%|██████████| 1/1 [00:00<00:00, 103.02it/s]
552 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    66dd2f8fed58c527/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
553 preprocess_samples begin ...
554 uncertainty shape: 720
555 ./val_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
556 classify begin
557 3908
558 0%|          | 0/20 [00:00<?, ?it/s]us_add_1_818
559 us_add_1_818
560 399it [00:08, 140.35it/s]us_add_1_818
561 us_add_1_818
562 us_add_1_818
563 us_add_1_818
564 900it [00:21, 103.26it/s]us_add_1_818
565 us_add_1_818
566 us_add_1_818
567 us_add_1_818
568 1396it [00:35, 100.47it/s]us_add_1_818
569 us_add_1_818
570 us_add_1_818
571 1453it [00:48, 16.94it/s] us_add_1_818
572 1894it [00:48, 120.38it/s]us_add_1_818
573 us_add_1_818
574 us_add_1_818
575 us_add_1_818
576 2375it [01:02, 99.09it/s]us_add_1_818
577 us_add_1_818
578 us_add_1_818
579 us_add_1_818
580 2855it [01:15, 96.64it/s]us_add_1_818
581 us_add_1_818
582 us_add_1_818
583 2904it [01:26, 96.64it/s]us_add_1_818
```

```
584 3371it [01:29, 124.79it/s]us_add_1_818
585 us_add_1_818
586 us_add_1_818
587 us_add_1_818
588 3861it [01:42, 100.38it/s]us_add_1_818
589 us_add_1_818
590 us_add_1_818
591 us_add_1_818
592 4280it [01:56, 72.37it/s]us_add_1_818
593 us_add_1_818
594 us_add_1_818
595 us_add_1_818
596 4775it [02:09, 94.53it/s]us_add_1_818
597 us_add_1_818
598 us_add_1_818
599 us_add_1_818
600 5263it [02:23, 97.80it/s]us_add_1_818
601 us_add_1_818
602 us_add_1_818
603 us_add_1_818
604 5766it [02:36, 100.58it/s]us_add_1_818
605 us_add_1_818
606 us_add_1_818
607 us_add_1_818
608 6231it [02:50, 94.82it/s]us_add_1_818
609 us_add_1_818
610 us_add_1_818
611 us_add_1_818
612 6704it [03:03, 94.40it/s]us_add_1_818
613 us_add_1_818
614 us_add_1_818
615 6777it [03:16, 17.38it/s]us_add_1_818
616 7177it [03:16, 96.10it/s]us_add_1_818
617 us_add_1_818
618 us_add_1_818
619 us_add_1_818
620 7726it [03:30, 126.83it/s]us_add_1_818
621 us_add_1_818
622 us_add_1_818
623 us_add_1_818
624 8226it [03:43, 103.80it/s]us_add_1_818
```

```
625 us_add_1_818
626 us_add_1_818
627 8229it [03:56, 13.38it/s] us_add_1_818
628 8638it [03:57, 95.29it/s] us_add_1_818
629 us_add_1_818
630 us_add_1_818
631 us_add_1_818
632 9136it [04:10, 99.67it/s] us_add_1_818
633 us_add_1_818
634 us_add_1_818
635 us_add_1_818
636 9634it [04:24, 99.25it/s] us_add_1_818
637 us_add_1_818
638 epoch number 19
639 us_add_1_818
640 us_add_1_818
641 9680it [04:36, 99.25it/s] us_add_1_818
642 us_add_1_818
643 global t is : 3
644 test epoch results {'accuracy': 0.538562091503268, 'f1_weighted': 0.5012490963053169, 'f1_macro': 0.3876085410531718, 'f1': array([0.83838384, 0.09302326, 0.23684211, 0.24581006, 0.53308129, 0.0, 0.43703704, 0.5911414, 0.51315789]), 'precision': array([0.82587065, 0.33333333, 0.4, 0.44761905, 0.0, 0.61458333, 0.48060942, 0.72222222]), 'recall': array([0.85128205, 0.05405405, 0.18367347, 0.17741935, 0.6588785, 0.0, 0.33908046, 0.76769912, 0.39795918])}
645
646
647
648 val epoch results {'accuracy': 0.5986111111111111, 'f1_weighted': 0.5517559214778279, 'f1_macro': 0.36567366073779567, 'f1': array([0.8490566, 0.0, 0.33333333, 0.17307692, 0.36036036, 0.0, 0.41818182, 0.71587744, 0.44117647]), 'precision': array([0.8411215, 0.0, 1.0, 0.33333333, 0.26315789, 0.0, 0.65714286, 0.5990676, 0.68181818]), 'recall': array([0.85714286, 0.0, 0.2, 0.11688312, 0.57142857,
```

```
651          0.      , 0.30666667, 0.88927336, 0.  
32608696])}  
652 uncertainty new embedding 9741  
653 uncertainty len embdedding 9741  
654 MLP_1h(  
655     (l1): Linear(in_features=36, out_features=100,  
bias=True)  
656     (l2): Linear(in_features=100, out_features=9, bias  
=True)  
657 )  
658 9680it [04:39, 34.69it/s]  
659 ['people are praying god bless folded hands lord in  
their thoughts\n']  
660 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]  
661 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 142.86it/s]  
662 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-57369d6331886651/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
663 100%|██████████| 1/1 [00:00<00:00, 97.04it/s]  
664 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
57369d6331886651/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
665 Downloading data files: 100%|██████████| 1/1 [00:00  
<?, ?it/s]  
666 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 142.94it/s]  
667 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-8ba0771ec6166468/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
668 100%|██████████| 1/1 [00:00<00:00, 95.08it/s]  
669 Dataset csv downloaded and prepared to C:/Users/
```

```
669 admin/.cache/huggingface/datasets/csv/default-
8ba0771ec6166468/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
670 Downloading data files: 100%|██████████| 1/1 [00:00<
00:00, 1023.75it/s]
671 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-
3a018f717961174b/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
672 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 104.57it/s]
673 100%|██████████| 1/1 [00:00<00:00, 87.05it/s]
674 Dataset csv downloaded and prepared to C:/Users/admin/.cache/huggingface/datasets/csv/default-
3a018f717961174b/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
675 Downloading data files: 100%|██████████| 1/1 [00:00<
00:00, 2001.10it/s]
676 Extracting data files: 0%|          | 0/1 [00:00
<, ?it/s]Downloading and preparing dataset csv/
default to C:/Users/admin/.cache/huggingface/
datasets/csv/default-951ea3d6ba6b3fe6/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1...
677 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 10.97it/s]
678 100%|██████████| 1/1 [00:00<00:00, 66.66it/s]
679 Dataset csv downloaded and prepared to C:/Users/admin/.cache/huggingface/datasets/csv/default-
951ea3d6ba6b3fe6/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
3bcc7ec513e1. Subsequent calls will reuse this data.
680 t is : 4
681 addlen is: 2000
682 noexp_df.shape[0] last 9241
683 unexplained dataset length is:
684 9241
685 embedding begin
```

```
686 trian and val dataset length: 56160
687 us_add_1_818
688 us_add_1_818
689 us_add_1_818
690 us_add_1_818
691 us_add_1_818
692 us_add_1_818
693 us_add_1_818
694 us_add_1_818
695 432.0
696 ./embeddings/NEW_bertie_embeddings_textattack/bert-
    base-uncased-MNLI_subset_1.pt
697 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ba164b778eb30a12/0.
    0.0/
698 654658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1)
699 100%|██████████| 1/1 [00:00<00:00, 333.23it/s]
700 test len 20865
700 Downloading data files: 100%|██████████| 1/1 [00:00
    <?, ?it/s]
701 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 142.78it/s]
702 Generating train split: 0 examples [00:00, ?
    examples/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-9c6b4ea44ca0736a/0.0.0/
    654658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1...
703 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    9c6b4ea44ca0736a/0.0.0/
    654658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
704 100%|██████████| 1/1 [00:00<00:00, 66.49it/s]
705 preprocess_samples begin ...
706 uncertainty shape: 1530
707 ./test_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
708 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ca5df4ccf35536d3/0.
```

```
708 0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1)
709 100%|██████████| 1/1 [00:00<00:00, 498.37it/s]
710 val len 10439
711 Downloading data files: 100%|██████████| 1/1 [00:00
    <?, ?it/s]
712 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 106.98it/s]
713 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-
    75baa97f5e051b81/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1...
714 100%|██████████| 1/1 [00:00<00:00, 91.22it/s]
715 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    75baa97f5e051b81/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc85
    3bcc7ec513e1. Subsequent calls will reuse this data.
716 preprocess_samples begin ...
717 uncertainty shape: 720
718 ./val_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
719 classify begin
720 4408
721 0%|                  | 0/20 [00:00<?, ?it/s]us_add_1_818
722 us_add_1_818
723 502it [00:08, 202.52it/s]us_add_1_818
724 us_add_1_818
725 us_add_1_818
726 us_add_1_818
727 1012it [00:24, 143.52it/s]us_add_1_818
728 us_add_1_818
729 us_add_1_818
730 us_add_1_818
731 1599it [00:38, 156.73it/s]us_add_1_818
732 us_add_1_818
733 us_add_1_818
734 us_add_1_818
735 2138it [00:52, 126.75it/s]us_add_1_818
```

```
736 us_add_1_818
737 us_add_1_818
738 us_add_1_818
739 2654it [01:07, 119.17it/s]us_add_1_818
740 us_add_1_818
741 us_add_1_818
742 2701it [01:20, 14.98it/s] us_add_1_818
743 3186it [01:20, 130.99it/s]us_add_1_818
744 us_add_1_818
745 us_add_1_818
746 us_add_1_818
747 3715it [01:35, 121.79it/s]us_add_1_818
748 us_add_1_818
749 us_add_1_818
750 3781it [01:49, 15.51it/s] us_add_1_818
751 4296it [01:49, 155.97it/s]us_add_1_818
752 us_add_1_818
753 us_add_1_818
754 us_add_1_818
755 4807it [02:03, 104.57it/s]us_add_1_818
756 us_add_1_818
757 us_add_1_818
758 us_add_1_818
759 5355it [02:17, 108.37it/s]us_add_1_818
760 us_add_1_818
761 us_add_1_818
762 5401it [02:30, 17.32it/s] us_add_1_818
763 5934it [02:31, 142.41it/s]us_add_1_818
764 us_add_1_818
765 us_add_1_818
766 us_add_1_818
767 6387it [02:44, 82.06it/s]us_add_1_818
768 us_add_1_818
769 us_add_1_818
770 us_add_1_818
771 7013it [02:58, 140.08it/s]us_add_1_818
772 us_add_1_818
773 us_add_1_818
774 7021it [03:11, 14.85it/s] us_add_1_818
775 7503it [03:11, 129.91it/s]us_add_1_818
776 us_add_1_818
```

```
777 us_add_1_818
778 us_add_1_818
779 8084it [03:26, 132.29it/s]us_add_1_818
780 us_add_1_818
781 us_add_1_818
782 8101it [03:39, 15.15it/s] us_add_1_818
783 8587it [03:39, 135.22it/s]us_add_1_818
784 us_add_1_818
785 us_add_1_818
786 us_add_1_818
787 9114it [03:53, 109.44it/s]us_add_1_818
788 us_add_1_818
789 us_add_1_818
790 us_add_1_818
791 9642it [04:06, 104.81it/s]us_add_1_818
792 us_add_1_818
793 us_add_1_818
794 9721it [04:20, 18.57it/s] us_add_1_818
795 10202it [04:20, 131.85it/s]us_add_1_818
796 us_add_1_818
797 us_add_1_818
798 us_add_1_818
799 10800it [04:34, 157.09it/s]us_add_1_818
800 us_add_1_818
801 epoch number 19
802 us_add_1_818
803 us_add_1_818
804 10800it [04:48, 157.09it/s]us_add_1_818
805 us_add_1_818
806 global t is : 4
807 test epoch results {'accuracy': 0.561437908496732, 'f1_weighted': 0.5211855719592314, 'f1_macro': 0.42122743383448097, 'f1': array([0.83292978, 0.22222222, 0.3030303 , 0.20731707, 0.58924731, 0. , 0.57419355, 0.59387924, 0.46822742]), 'precision': array([0.78899083, 0.625 , 0.58823529, 0.425 , 0.54581673, 0. , 0.65441176, 0.47424042, 0.67961165]), 'recall': array([0.88205128, 0.13513514 , 0.20408163, 0.13709677, 0.64018692, 0. , 0.51149425, 0.79424779, 0.] )
```

```
810 35714286])}
```

```
811 val epoch results {'accuracy': 0.6222222222222222, 'f1_weighted': 0.5659882678030878, 'f1_macro': 0.41575087543314626, 'f1': array([0.84347826, 0.57142857, 0.13483146, 0.49438202, 0.58730159, 0.7073509, 0.40298507]), 'precision': array([0.776, 0.7254902, 0.59027778, 0.64285714]), 'recall': array([0.92380952, 0.40740741, 0.7792208, 0.62857143, 0.49333333, 0.88235294, 0.29347826])}
```

```
815 10800it [04:49, 37.25it/s]
```

```
816 uncertainty new embedding 9241
```

```
817 uncertainty len embdedding 9241
```

```
818 MLP_1h(
```

```
819     (l1): Linear(in_features=39, out_features=100, bias=True)
```

```
820     (l2): Linear(in_features=100, out_features=9, bias=True)
```

```
821 )
```

```
822 ['there is significant damage homes losses no electricity water has been restored\n']
```

```
823 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-3cc0ae4f2f66fae8/0.0.0/ 6954658bab30a358235fa864b05cf819af0e179325c740e4bc853bcc7ec513e1...
```

```
824 Downloading data files: 100%|██████████| 1/1 [00:00<00:00, 1923.99it/s]
```

```
825 Extracting data files: 100%|██████████| 1/1 [00:00<00:00, 156.17it/s]
```

```
826 100%|██████████| 1/1 [00:00<00:00, 105.29it/s]
```

```
827 Dataset csv downloaded and prepared to C:/Users/admin/.cache/huggingface/datasets/csv/default-3cc0ae4f2f66fae8/0.0.0/ 6954658bab30a358235fa864b05cf819af0e179325c740e4bc853bcc7ec513e1. Subsequent calls will reuse this data.
```

```
828 Downloading data files: 100%|██████████| 1/1 [00:00<?, ?it/s]
```

```
829 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
9ef53ed51abef6c1/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
830 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 145.05it/s]  
831 100%|██████████| 1/1 [00:00<00:00, 94.22it/s]  
832 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
9ef53ed51abef6c1/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
833 Downloading data files: 100%|██████████| 1/1 [00:00<  
00:00, 1992.54it/s]  
834 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
c6ef2dd356e11330/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
835 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 121.19it/s]  
836 100%|██████████| 1/1 [00:00<00:00, 90.09it/s]  
837 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
c6ef2dd356e11330/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
838 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
839 Extracting data files: 0% | 0/1 [00:00  
<, ?it/s] Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-dad7a0cfaf759557/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
840 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 10.81it/s]  
841 100%|██████████| 1/1 [00:00<00:00, 39.91it/s]  
842 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-
```

```
842 dad7a0cfaf759557/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
843 t is : 5  
844 addlen is: 2500  
845 noexp_df.shape[0] last 8741  
846 unexplained dataset length is:  
847 8741  
848 embedding begin  
849 trian and val dataset length: 68040  
850 us_add_1_818  
851 us_add_1_818  
852 us_add_1_818  
853 us_add_1_818  
854 us_add_1_818  
855 us_add_1_818  
856 us_add_1_818  
857 us_add_1_818  
858 486.0  
859 ./embeddings/NEW_bertie_embeddings_textattack/bert-  
base-uncased-MNLI_subset_1.pt  
860 Found cached dataset csv (C:/Users/admin/.cache/  
huggingface/datasets/csv/default-ba164b778eb30a12/0.  
0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1)  
861 100%|██████████| 1/1 [00:00<00:00, 399.99it/s]  
862 test len 22470  
863 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
864 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 153.92it/s]  
865 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
be593bded45aee5e/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
866 100%|██████████| 1/1 [00:00<00:00, 71.61it/s]  
867 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
be593bded45aee5e/0.0.0/
```

```
867 6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
868 preprocess_samples begin ...  
869 uncertainty shape: 1530  
870 ./test_embeddings/NEW_bertie_embeddings_textattack/  
bert-base-uncased-MNLI_subset_1.pt  
871 Found cached dataset csv (C:/Users/admin/.cache/  
huggingface/datasets/csv/default-ca5df4ccf35536d3/0.  
0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1)  
872 100%|██████████| 1/1 [00:00<00:00, 487.82it/s]  
873 val len 11242  
874 Downloading and preparing dataset csv/default to C:/  
Users/admin/.cache/huggingface/datasets/csv/default-  
237f3a40167da079/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1...  
875 Downloading data files: 100%|██████████| 1/1 [00:00<  
00:00, 1070.25it/s]  
876 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 124.35it/s]  
877 100%|██████████| 1/1 [00:00<00:00, 90.88it/s]  
878 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
237f3a40167da079/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc85  
3bcc7ec513e1. Subsequent calls will reuse this data.  
879 preprocess_samples begin ...  
880 uncertainty shape: 720  
881 ./val_embeddings/NEW_bertie_embeddings_textattack/  
bert-base-uncased-MNLI_subset_1.pt  
882 classify begin  
883 4908  
884 0% | 0/20 [00:00<?, ?it/s] us_add_1_818  
885 us_add_1_818  
886 587it [00:08, 272.31it/s] us_add_1_818  
887 us_add_1_818  
888 us_add_1_818  
889 609it [00:21, 14.97it/s] us_add_1_818
```

```
890 1153it [00:22, 176.14it/s]us_add_1_818
891 us_add_1_818
892 us_add_1_818
893 us_add_1_818
894 1789it [00:35, 185.47it/s]us_add_1_818
895 us_add_1_818
896 us_add_1_818
897 us_add_1_818
898 2410it [00:49, 181.35it/s]us_add_1_818
899 us_add_1_818
900 us_add_1_818
901 2433it [01:02, 14.72it/s] us_add_1_818
902 3022it [01:03, 188.84it/s]us_add_1_818
903 us_add_1_818
904 us_add_1_818
905 us_add_1_818
906 3609it [01:16, 143.17it/s]us_add_1_818
907 us_add_1_818
908 us_add_1_818
909 us_add_1_818
910 4251it [01:30, 173.89it/s]us_add_1_818
911 us_add_1_818
912 us_add_1_818
913 us_add_1_818
914 4811it [01:43, 137.94it/s]us_add_1_818
915 us_add_1_818
916 us_add_1_818
917 us_add_1_818
918 5435it [01:57, 176.13it/s]us_add_1_818
919 us_add_1_818
920 us_add_1_818
921 5473it [02:10, 15.86it/s] us_add_1_818
922 6030it [02:11, 180.67it/s]us_add_1_818
923 us_add_1_818
924 us_add_1_818
925 us_add_1_818
926 6675it [02:24, 180.16it/s]us_add_1_818
927 us_add_1_818
928 us_add_1_818
929 us_add_1_818
930 7232it [02:38, 136.21it/s]us_add_1_818
```

```
931 us_add_1_818
932 us_add_1_818
933 7297it [02:51, 17.62it/s] us_add_1_818
934 7870it [02:52, 201.07it/s] us_add_1_818
935 us_add_1_818
936 us_add_1_818
937 us_add_1_818
938 8462it [03:05, 172.47it/s] us_add_1_818
939 us_add_1_818
940 us_add_1_818
941 us_add_1_818
942 9109it [03:19, 186.97it/s] us_add_1_818
943 us_add_1_818
944 us_add_1_818
945 9121it [03:32, 14.72it/s] us_add_1_818
946 9695it [03:33, 185.48it/s] us_add_1_818
947 us_add_1_818
948 us_add_1_818
949 us_add_1_818
950 10282it [03:46, 144.88it/s] us_add_1_818
951 us_add_1_818
952 us_add_1_818
953 us_add_1_818
954 10908it [04:00, 175.08it/s] us_add_1_818
955 us_add_1_818
956 us_add_1_818
957 10944it [04:10, 175.08it/s] us_add_1_818
958 11503it [04:13, 203.62it/s] us_add_1_818
959 us_add_1_818
960 us_add_1_818
961 us_add_1_818
962 12118it [04:27, 180.74it/s] us_add_1_818
963 us_add_1_818
964 epoch number 19
965 us_add_1_818
966 us_add_1_818
967 12160it [04:40, 180.74it/s] us_add_1_818
968 us_add_1_818
969 global t is : 5
970 test epoch results {'accuracy': 0.5849673202614379
, 'f1_weighted': 0.5482175123949875, 'f1_macro': 0.
```

```

970 43306668947731763, 'f1': array([0.83294118, 0.
16326531, 0.15873016, 0.27672956, 0.60629921,
971 0.08247423, 0.62857143, 0.61184792, 0.
53674121]), 'precision': array([0.76956522, 0.
33333333, 0.35714286, 0.62857143, 0.52380952,
972 0.5 , 0.70212766, 0.5095729 , 0.
71794872]), 'recall': array([0.90769231, 0.10810811
, 0.10204082, 0.17741935, 0.71962617,
973 0.04494382, 0.56896552, 0.76548673, 0.
42857143])}
974 val epoch results {'accuracy': 0.6291666666666667
, 'f1_weighted': 0.5744765707348661, 'f1_macro': 0.
40764680035108597, 'f1': array([0.84210526, 0
.
, 0.46153846, 0.09302326, 0.4742268 ,
975 0. , 0.61313869, 0.72 , 0.
46478873]), 'precision': array([0.7804878 , 0
.
, 1. , 0.44444444, 0.37096774,
976 0. , 0.67741935, 0.61313869, 0.66
]), 'recall': array([0.91428571, 0.
, 0.3 , 0.05194805, 0.65714286,
977 0. , 0.56 , 0.87197232, 0.
35869565])}
978 12160it [04:42, 43.04it/s]
979 uncertainty new embedding 8741
980 uncertainty len embdedding 8741
981 MLP_1h(
982 (l1): Linear(in_features=42, out_features=100,
bias=True)
983 (l2): Linear(in_features=100, out_features=9,
bias=True)
984 )
985 ['people are offering to help volunteering donate
donations give $ money generously\n']
986 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-3fd1beb9fc9617b3/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
987 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
988 Extracting data files: 100%|██████████| 1/1 [00:00<

```

```
988 00:00, 166.63it/s]
989 100%|██████████| 1/1 [00:00<00:00, 100.11it/s]
990 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
3fd1beb9fc9617b3/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
991 Downloading data files: 100%|██████████| 1/1 [00:00
<00:00, 1855.07it/s]
992 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-e8e5bc0c2ce3c0bc/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
993 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 118.21it/s]
994 100%|██████████| 1/1 [00:00<00:00, 66.67it/s]
995 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
e8e5bc0c2ce3c0bc/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
996 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
997 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-b311e58fe15de1df/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
998 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 125.16it/s]
999 100%|██████████| 1/1 [00:00<00:00, 64.52it/s]
1000 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
b311e58fe15de1df/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1001 Downloading data files: 100%|██████████| 1/1 [00:00
```

```
1001 <?, ?it/s]
1002 Extracting data files:  0% | 0/1 [00:00
    <?, ?it/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-c2f753301d08a380/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1...
1003 Extracting data files: 100% | [REDACTED] | 1/1 [00:00<
    00:00, 10.11it/s]
1004  0% | 0/1 [00:00<?, ?it/s]Dataset csv
    downloaded and prepared to C:/Users/admin/.cache/
    huggingface/datasets/csv/default-c2f753301d08a380/0
    .0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1. Subsequent calls will reuse this
    data.
1005 100% | [REDACTED] | 1/1 [00:00<00:00, 20.41it/s]
1006 t is : 6
1007 addlen is: 3000
1008 noexp_df.shape[0] last 8241
1009 unexplained dataset length is:
1010 8241
1011 embedding begin
1012 trian and val dataset length: 81000
1013 us_add_1_818
1014 us_add_1_818
1015 us_add_1_818
1016 us_add_1_818
1017 us_add_1_818
1018 us_add_1_818
1019 us_add_1_818
1020 us_add_1_818
1021 540.0
1022 ./embeddings/NEW_bertie_embeddings_textattack/bert-
    base-uncased-MNLI_subset_1.pt
1023 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ba164b778eb30a12/0
    .0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1)
1024 100% | [REDACTED] | 1/1 [00:00<00:00, 500.04it/s]
```

```
1025 test len 24075
1026 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-8587bc267677d999/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1027 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1028 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 143.13it/s]
1029 100%|██████████| 1/1 [00:00<00:00, 83.58it/s]
1030 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
8587bc267677d999/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1031 preprocess_samples begin ...
1032 uncertainty shape: 1530
1033 ./test_embeddings/NEW_bertie_embeddings_textattack/
bert-base-uncased-MNLI_subset_1.pt
1034 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ca5df4ccf35536d3/0
.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1)
1035 100%|██████████| 1/1 [00:00<00:00, 955.20it/s]
1036 val len 12045
1037 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-36850179de0fff59/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1038 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1039 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 147.95it/s]
1040 100%|██████████| 1/1 [00:00<00:00, 95.24it/s]
1041 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
36850179de0fff59/0.0.0/
```

```
1041      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1. Subsequent calls will reuse this
      data.
1042 preprocess_samples begin ...
1043 uncertainty shape: 720
1044 ./val_embeddings/NEW_bertie_embeddings_textattack/
      bert-base-uncased-MNLI_subset_1.pt
1045 classify begin
1046 5408
1047 0% | 0/20 [00:00<?, ?it/s]us_add_1_818
1048 us_add_1_818
1049 670it [00:08, 378.06it/s]us_add_1_818
1050 us_add_1_818
1051 675it [00:19, 378.06it/s]us_add_1_818
1052 us_add_1_818
1053 1307it [00:28, 156.55it/s]us_add_1_818
1054 us_add_1_818
1055 us_add_1_818
1056 1351it [00:41, 17.69it/s] us_add_1_818
1057 1985it [00:41, 204.83it/s]us_add_1_818
1058 us_add_1_818
1059 us_add_1_818
1060 us_add_1_818
1061 2670it [00:55, 194.79it/s]us_add_1_818
1062 us_add_1_818
1063 us_add_1_818
1064 us_add_1_818
1065 3349it [01:08, 194.82it/s]us_add_1_818
1066 us_add_1_818
1067 us_add_1_818
1068 3375it [01:19, 194.82it/s]us_add_1_818
1069 4032it [01:22, 246.43it/s]us_add_1_818
1070 us_add_1_818
1071 us_add_1_818
1072 us_add_1_818
1073 4661it [01:35, 158.84it/s]us_add_1_818
1074 us_add_1_818
1075 us_add_1_818
1076 us_add_1_818
1077 5341it [01:49, 193.37it/s]us_add_1_818
```

```
1078 us_add_1_818
1079 us_add_1_818
1080 5401it [02:01, 18.91it/s] us_add_1_818
1081 6020it [02:02, 204.35it/s] us_add_1_818
1082 us_add_1_818
1083 us_add_1_818
1084 us_add_1_818
1085 6744it [02:16, 211.25it/s] us_add_1_818
1086 us_add_1_818
1087 us_add_1_818
1088 us_add_1_818
1089 7392it [02:29, 161.44it/s] us_add_1_818
1090 us_add_1_818
1091 us_add_1_818
1092 7426it [02:42, 17.82it/s] us_add_1_818
1093 8044it [02:43, 199.28it/s] us_add_1_818
1094 us_add_1_818
1095 us_add_1_818
1096 us_add_1_818
1097 8696it [02:56, 180.46it/s] us_add_1_818
1098 us_add_1_818
1099 us_add_1_818
1100 8775it [03:09, 180.46it/s] us_add_1_818
1101 9393it [03:10, 232.51it/s] us_add_1_818
1102 us_add_1_818
1103 us_add_1_818
1104 us_add_1_818
1105 10110it [03:24, 241.29it/s] us_add_1_818
1106 us_add_1_818
1107 us_add_1_818
1108 us_add_1_818
1109 10792it [03:38, 192.65it/s] us_add_1_818
1110 us_add_1_818
1111 us_add_1_818
1112 10800it [03:49, 192.65it/s] us_add_1_818
1113 11396it [03:51, 192.61it/s] us_add_1_818
1114 us_add_1_818
1115 us_add_1_818
1116 us_add_1_818
1117 12091it [04:05, 198.56it/s] us_add_1_818
1118 us_add_1_818
```

```

1119 us_add_1_818
1120 us_add_1_818
1121 12796it [04:19, 203.97it/s]us_add_1_818
1122 us_add_1_818
1123 us_add_1_818
1124 12826it [04:32, 17.03it/s] us_add_1_818
1125 13446it [04:32, 195.87it/s]us_add_1_818
1126 us_add_1_818
1127 epoch number 19
1128 us_add_1_818
1129 us_add_1_818
1130 us_add_1_818
1131 us_add_1_818
1132 global t is : 6
1133 test epoch results {'accuracy': 0.5915032679738562
, 'f1_weighted': 0.5554061568915933, 'f1_macro': 0.
45349120652001346, 'f1': array([0.8277512 , 0.05
, 0.49019608, 0.23529412, 0.6029106 ,
1134 0.06451613, 0.63787375, 0.61591696, 0.
55696203]), 'precision': array([0.77578475, 0.
33333333, 0.47169811, 0.62068966, 0.54307116,
1135 0.75 , 0.75590551, 0.50568182, 0.
73333333]), 'recall': array([0.88717949, 0.02702703
, 0.51020408, 0.14516129, 0.67757009,
1136 0.03370787, 0.55172414, 0.78761062, 0.
44897959])}
1137 val epoch results {'accuracy': 0.6277777777777778
, 'f1_weighted': 0.565186736018428, 'f1_macro': 0.
4167034392397122, 'f1': array([0.84070796, 0
. , 0.625 , 0.025 , 0.47826087,
1138 0. , 0.63157895, 0.71369295, 0.
43609023]), 'precision': array([0.78512397, 0
. , 0.83333333, 0.33333333, 0.38596491,
1139 0. , 0.72413793, 0.59447005, 0.
70731707]), 'recall': array([0.9047619 , 0
. , 0.5 , 0.01298701, 0.62857143,
1140 0. , 0.56 , 0.89273356, 0.
31521739])}
1141 13500it [04:47, 46.92it/s]
1142 uncertainty new embedding 8241
1143 uncertainty len embedding 8241

```

```
1144 MLP_1h(  
1145     (l1): Linear(in_features=45, out_features=100,  
     bias=True)  
1146     (l2): Linear(in_features=100, out_features=9,  
     bias=True)  
1147 )  
1148 ['advice warning to be careful tips and can give  
guidance alert Watches\\n']  
1149 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1150 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 166.30it/s]  
1151 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-d0f34ce1f26a5b09/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1152 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
d0f34ce1f26a5b09/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1153 100%|██████████| 1/1 [00:00<00:00, 90.91it/s]  
1154 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1155 Downloading and preparing dataset csv/default to C  
:/Users/admin/.cache/huggingface/datasets/csv/  
default-9f330c419436cd04/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1156 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 110.98it/s]  
1157 100%|██████████| 1/1 [00:00<00:00, 66.67it/s]  
1158 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
9f330c419436cd04/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.
```

```
1159 Downloading data files: 100%|██████████| 1/1 [00:00
    <, ?it/s]
1160 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 110.79it/s]
1161 Generating train split: 0 examples [00:00, ?
    examples/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-2005b29decd3356e/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1...
1162 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    2005b29decd3356e/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1. Subsequent calls will reuse this
    data.
1163 100%|██████████| 1/1 [00:00<00:00, 100.00it/s]
1164 Downloading data files: 100%|██████████| 1/1 [00:00
    <00:00, 2214.52it/s]
1165 Extracting data files: 0%|          | 0/1 [00:00
    <, ?it/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-95da59fa0c055e16/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1...
1166 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 9.35it/s]
1167 100%|██████████| 1/1 [00:00<00:00, 64.23it/s]
1168 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    95da59fa0c055e16/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1. Subsequent calls will reuse this
    data.
1169 t is : 7
1170 addlen is: 3500
1171 noexp_df.shape[0] last 7741
1172 unexplained dataset length is:
1173 7741
1174 embedding begin
1175 trian and val dataset length: 93600
```

```
1176 us_add_1_818
1177 us_add_1_818
1178 us_add_1_818
1179 us_add_1_818
1180 us_add_1_818
1181 us_add_1_818
1182 us_add_1_818
1183 us_add_1_818
1184 585.0
1185 ./embeddings/NEW_bertie_embeddings_textattack/bert-
base-uncased-MNLI_subset_1.pt
1186 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ba164b778eb30a12/0
.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1)
1187 100%|██████████| 1/1 [00:00<00:00, 90.91it/s]
1188 test len 25680
1189 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-92fda9b934bf1ac3/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1190 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1191 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 147.62it/s]
1192 100%|██████████| 1/1 [00:00<00:00, 71.44it/s]
1193 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
92fda9b934bf1ac3/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1194 preprocess_samples begin ...
1195 uncertainty shape: 1530
1196 ./test_embeddings/NEW_bertie_embeddings_textattack/
bert-base-uncased-MNLI_subset_1.pt
1197 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ca5df4ccf35536d3/0
.0.0/
```

```
1197      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1)
1198 100%|██████████| 1/1 [00:00<00:00, 99.89it/s]
1199 val len 12848
1200 Downloading data files: 100%|██████████| 1/1 [00:00
      <, ?it/s]
1201 Extracting data files: 100%|██████████| 1/1 [00:00<
      00:00, 142.73it/s]
1202 Generating train split: 0 examples [00:00, ?
      examples/s]Downloading and preparing dataset csv/
      default to C:/Users/admin/.cache/huggingface/
      datasets/csv/default-f0d7a67d5d991c6c/0.0.0/
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1...
1203 100%|██████████| 1/1 [00:00<00:00, 90.84it/s]
1204 Dataset csv downloaded and prepared to C:/Users/
      admin/.cache/huggingface/datasets/csv/default-
      f0d7a67d5d991c6c/0.0.0/
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1. Subsequent calls will reuse this
      data.
1205 preprocess_samples begin ...
1206 uncertainty shape: 720
1207 ./val_embeddings/NEW_bertie_embeddings_textattack/
      bert-base-uncased-MNLI_subset_1.pt
1208 classify begin
1209 5908
1210  0%|          | 0/20 [00:00<?, ?it/s]us_add_1_818
1211 us_add_1_818
1212 684it [00:08, 408.80it/s]us_add_1_818
1213 us_add_1_818
1214 us_add_1_818
1215 us_add_1_818
1216 1449it [00:22, 262.01it/s]us_add_1_818
1217 us_add_1_818
1218 us_add_1_818
1219 us_add_1_818
1220 2161it [00:36, 207.52it/s]us_add_1_818
1221 us_add_1_818
1222 us_add_1_818
```

```
1223 2197it [00:48, 17.82it/s] us_add_1_818
1224 2906it [00:49, 264.40it/s]us_add_1_818
1225 us_add_1_818
1226 us_add_1_818
1227 us_add_1_818
1228 3617it [01:03, 205.39it/s]us_add_1_818
1229 us_add_1_818
1230 us_add_1_818
1231 us_add_1_818
1232 4321it [01:17, 199.26it/s]us_add_1_818
1233 us_add_1_818
1234 us_add_1_818
1235 us_add_1_818
1236 5055it [01:31, 238.50it/s]us_add_1_818
1237 us_add_1_818
1238 us_add_1_818
1239 us_add_1_818
1240 5785it [01:44, 243.88it/s]us_add_1_818
1241 us_add_1_818
1242 us_add_1_818
1243 5856it [01:56, 243.88it/s]us_add_1_818
1244 6579it [01:58, 278.13it/s]us_add_1_818
1245 us_add_1_818
1246 us_add_1_818
1247 us_add_1_818
1248 7315it [02:12, 261.68it/s]us_add_1_818
1249 us_add_1_818
1250 us_add_1_818
1251 us_add_1_818
1252 8028it [02:25, 205.46it/s]us_add_1_818
1253 us_add_1_818
1254 us_add_1_818
1255 8053it [02:38, 16.53it/s] us_add_1_818
1256 8751it [02:39, 252.04it/s]us_add_1_818
1257 us_add_1_818
1258 us_add_1_818
1259 us_add_1_818
1260 9440it [02:53, 197.45it/s]us_add_1_818
1261 us_add_1_818
1262 us_add_1_818
1263 us_add_1_818
```

```
1264 10232it [03:07, 265.98it/s]us_add_1_818
1265 us_add_1_818
1266 us_add_1_818
1267 us_add_1_818
1268 10931it [03:20, 201.10it/s]us_add_1_818
1269 us_add_1_818
1270 us_add_1_818
1271 us_add_1_818
1272 11670it [03:34, 237.54it/s]us_add_1_818
1273 us_add_1_818
1274 us_add_1_818
1275 11713it [03:47, 17.04it/s] us_add_1_818
1276 12411it [03:48, 298.01it/s]us_add_1_818
1277 us_add_1_818
1278 us_add_1_818
1279 us_add_1_818
1280 13139it [04:01, 245.80it/s]us_add_1_818
1281 us_add_1_818
1282 us_add_1_818
1283 us_add_1_818
1284 13828it [04:15, 199.73it/s]us_add_1_818
1285 us_add_1_818
1286 us_add_1_818
1287 13908it [04:26, 199.73it/s]us_add_1_818
1288 14591it [04:29, 278.81it/s]us_add_1_818
1289 us_add_1_818
1290 epoch number 19
1291 us_add_1_818
1292 us_add_1_818
1293 us_add_1_818
1294 us_add_1_818
1295 global t is : 7
1296 test epoch results {'accuracy': 0.596078431372549
    , 'f1_weighted': 0.5590022660661128, 'f1_macro': 0.
    4484923642575984, 'f1': array([0.83732057, 0.
    12765957, 0.35897436, 0.25925926, 0.61349693,
1297     0.          , 0.64396285, 0.62432916, 0.
    57142857]), 'precision': array([0.78475336, 0.3
        , 0.48275862, 0.55263158, 0.54545455,
1298     0.          , 0.69798658, 0.52402402, 0.
    68571429]), 'recall': array([0.8974359 , 0.08108108
```

```
1298 , 0.28571429, 0.16935484, 0.70093458,
1299 0. , 0.59770115, 0.77212389, 0.
     48979592])}
1300 val epoch results {'accuracy': 0.6430555555555556
, 'f1_weighted': 0.5926777362185898, 'f1_macro': 0.
44547407218491525, 'f1': array([0.84955752, 0
. , 0.625 , 0.15555556, 0.52272727,
1301 0. , 0.68148148, 0.7197724 , 0.
45517241]), 'precision': array([0.79338843, 0
. , 0.83333333, 0.53846154, 0.43396226,
1302 0. , 0.76666667, 0.61111111, 0.
62264151]), 'recall': array([0.91428571, 0
. , 0.5 , 0.09090909, 0.65714286,
1303 0. , 0.61333333, 0.87543253, 0.
35869565])}
1304 14640it [04:44, 51.48it/s]
1305 uncertainty new embedding 7741
1306 uncertainty len embedding 7741
1307 MLP_1h(
1308     (l1): Linear(in_features=48, out_features=100,
      bias=True)
1309     (l2): Linear(in_features=100, out_features=9,
      bias=True)
1310 )
1311 ['contains useful information helps to understand
      the situation is important\n']
1312 Downloading and preparing dataset csv/default to C
      :/Users/admin/.cache/huggingface/datasets/csv/
      default-fd04af008c1f19b8/0.0.0/
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1...
1313 Downloading data files: 100%|██████████| 1/1 [00:00
      <00:00, 2000.14it/s]
1314 Extracting data files: 100%|██████████| 1/1 [00:00<
      00:00, 125.40it/s]
1315 100%|██████████| 1/1 [00:00<00:00, 105.89it/s]
1316 Dataset csv downloaded and prepared to C:/Users/
      admin/.cache/huggingface/datasets/csv/default-
      fd04af008c1f19b8/0.0.0/
      6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
      53bcc7ec513e1. Subsequent calls will reuse this
```

```
1316 data.  
1317 Downloading data files: 100%|██████████| 1/1 [00:00  
<00:00, 2173.21it/s]  
1318 Downloading and preparing dataset csv/default to C:  
:/Users/admin/.cache/huggingface/datasets/csv/  
default-9823fbed0bbead30/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1319 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 124.85it/s]  
1320 100%|██████████| 1/1 [00:00<00:00, 68.96it/s]  
1321 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
9823fbed0bbead30/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1322 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1323 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 110.73it/s]  
1324 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-85b68adccaab7726/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1325 100%|██████████| 1/1 [00:00<00:00, 86.94it/s]  
1326 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
85b68adccaab7726/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1327 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1328 Downloading and preparing dataset csv/default to C:  
:/Users/admin/.cache/huggingface/datasets/csv/  
default-6f31ded4fa0f0365/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...
```

```
1329 Extracting data files: 100% | 1/1 [00:00<00:00, 10.16it/s]
1330 0% | 0/1 [00:00<?, ?it/s]Dataset csv downloaded and prepared to C:/Users/admin/.cache/huggingface/datasets/csv/default-6f31ded4fa0f0365/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853bcc7ec513e1. Subsequent calls will reuse this data.
1331 100% | 1/1 [00:00<00:00, 48.78it/s]
1332 t is : 8
1333 addlen is: 4000
1334 noexp_df.shape[0] last 7241
1335 unexplained dataset length is:
1336 7241
1337 embedding begin
1338 trian and val dataset length: 108630
1339 us_add_1_818
1340 us_add_1_818
1341 us_add_1_818
1342 us_add_1_818
1343 us_add_1_818
1344 us_add_1_818
1345 us_add_1_818
1346 us_add_1_818
1347 639.0
1348 ./embeddings/NEW_bertie_embeddings_textattack/bert-base-uncased-MNLI_subset_1.pt
1349 Found cached dataset csv (C:/Users/admin/.cache/huggingface/datasets/csv/default-ba164b778eb30a12/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853bcc7ec513e1)
1350 100% | 1/1 [00:00<00:00, 999.83it/s]
1351 test len 27285
1352 Downloading and preparing dataset csv/default to C:/Users/admin/.cache/huggingface/datasets/csv/default-d09018c154cee717/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc853bcc7ec513e1...
1353 Downloading data files: 100% | 1/1 [00:00
```

```
1353 <00:00, 1991.60it/s]
1354 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 142.89it/s]
1355 100%|██████████| 1/1 [00:00<00:00, 68.96it/s]
1356 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
d09018c154cee717/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1357 preprocess_samples begin ...
1358 uncertainty shape: 1530
1359 ./test_embeddings/NEW_bertie_embeddings_textattack/
bert-base-uncased-MNLI_subset_1.pt
1360 Found cached dataset csv (C:/Users/admin/.cache/
huggingface/datasets/csv/default-ca5df4ccf35536d3/0
.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1)
1361 100%|██████████| 1/1 [00:00<00:00, 1030.29it/s]
1362 val len 13651
1363 Downloading data files: 100%|██████████| 1/1 [00:00
<00:00, 965.32it/s]
1364 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 144.01it/s]
1365 Generating train split: 0 examples [00:00, ?
examples/s]Downloading and preparing dataset csv/
default to C:/Users/admin/.cache/huggingface/
datasets/csv/default-0a997a0137a263fa/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1366 100%|██████████| 1/1 [00:00<00:00, 99.44it/s]
1367 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
0a997a0137a263fa/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1368 preprocess_samples begin ...
1369 uncertainty shape: 720
1370 ./val_embeddings/NEW_bertie_embeddings_textattack/
```

```
1370 bert-base-uncased-MNLI_subset_1.pt
1371 classify begin
1372 6408
1373 0% | 0/20 [00:00<?, ?it/s]us_add_1_818
1374 us_add_1_818
1375 779it [00:08, 445.22it/s]us_add_1_818
1376 us_add_1_818
1377 us_add_1_818
1378 800it [00:21, 16.42it/s] us_add_1_818
1379 1521it [00:22, 276.40it/s]us_add_1_818
1380 us_add_1_818
1381 us_add_1_818
1382 us_add_1_818
1383 2337it [00:36, 269.63it/s]us_add_1_818
1384 us_add_1_818
1385 us_add_1_818
1386 us_add_1_818
1387 3138it [00:49, 266.22it/s]us_add_1_818
1388 us_add_1_818
1389 us_add_1_818
1390 3197it [01:02, 19.57it/s] us_add_1_818
1391 3987it [01:03, 340.53it/s]us_add_1_818
1392 us_add_1_818
1393 us_add_1_818
1394 us_add_1_818
1395 4791it [01:17, 325.46it/s]us_add_1_818
1396 us_add_1_818
1397 us_add_1_818
1398 us_add_1_818
1399 5561it [01:31, 318.13it/s]us_add_1_818
1400 us_add_1_818
1401 us_add_1_818
1402 us_add_1_818
1403 6363it [01:44, 308.66it/s]us_add_1_818
1404 us_add_1_818
1405 us_add_1_818
1406 us_add_1_818
1407 7155it [01:58, 294.36it/s]us_add_1_818
1408 us_add_1_818
1409 us_add_1_818
1410 7192it [02:11, 16.31it/s] us_add_1_818
```

```
1411 7968it [02:12, 333.25it/s]us_add_1_818
1412 us_add_1_818
1413 us_add_1_818
1414 us_add_1_818
1415 8770it [02:26, 266.71it/s]us_add_1_818
1416 us_add_1_818
1417 us_add_1_818
1418 us_add_1_818
1419 9566it [02:40, 266.18it/s]us_add_1_818
1420 us_add_1_818
1421 us_add_1_818
1422 9589it [02:53, 16.87it/s] us_add_1_818
1423 10366it [02:54, 322.10it/s]us_add_1_818
1424 us_add_1_818
1425 us_add_1_818
1426 us_add_1_818
1427 11132it [03:07, 258.88it/s]us_add_1_818
1428 us_add_1_818
1429 us_add_1_818
1430 11186it [03:20, 258.88it/s]us_add_1_818
1431 11909it [03:21, 309.30it/s]us_add_1_818
1432 us_add_1_818
1433 us_add_1_818
1434 us_add_1_818
1435 12727it [03:35, 308.27it/s]us_add_1_818
1436 us_add_1_818
1437 us_add_1_818
1438 us_add_1_818
1439 13532it [03:49, 307.16it/s]us_add_1_818
1440 us_add_1_818
1441 us_add_1_818
1442 13584it [04:02, 17.52it/s] us_add_1_818
1443 14378it [04:03, 335.87it/s]us_add_1_818
1444 us_add_1_818
1445 us_add_1_818
1446 us_add_1_818
1447 15163it [04:17, 293.48it/s]us_add_1_818
1448 us_add_1_818
1449 us_add_1_818
1450 us_add_1_818
1451 15933it [04:30, 270.38it/s]us_add_1_818
```

```
1452 us_add_1_818
1453 epoch number 19
1454 us_add_1_818
1455 us_add_1_818
1456 us_add_1_818
1457 us_add_1_818
1458 global t is : 8
1459 test epoch results {'accuracy': 0.6013071895424836
    , 'f1_weighted': 0.569954709925661, 'f1_macro': 0.
4737739838241431, 'f1': array([0.85012285, 0.
28070175, 0.34210526, 0.29268293, 0.60475162,
1460          0.02222222, 0.66451613, 0.62206777, 0.
58479532]), 'precision': array([0.81603774, 0.4
    , 0.48148148, 0.6           , 0.562249       ,
1461          1.           , 0.75735294, 0.51216023, 0.
68493151]), 'recall': array([0.88717949, 0.21621622
    , 0.26530612, 0.19354839, 0.65420561,
1462          0.01123596, 0.59195402, 0.7920354 , 0.
51020408])}
1463 val epoch results {'accuracy': 0.6555555555555556
    , 'f1_weighted': 0.6063268658130024, 'f1_macro': 0.
4529581888478645, 'f1': array([0.86238532, 0
    .           , 0.58823529, 0.20224719, 0.52272727,
1464          0.           , 0.68613139, 0.72600834, 0.
48888889]), 'precision': array([0.83185841, 0
    .           , 0.71428571, 0.75           , 0.43396226,
1465          0.           , 0.75806452, 0.60697674, 0.
76744186]), 'recall': array([0.8952381 , 0
    .           , 0.5           , 0.11688312, 0.65714286,
1466          0.           , 0.62666667, 0.90311419, 0.
35869565])}
1467 uncertainty new embedding 7241
1468 uncertainty len embdedding 7241
1469 MLP_1h(
1470     (l1): Linear(in_features=51, out_features=100,
        bias=True)
1471     (l2): Linear(in_features=100, out_features=9,
        bias=True)
1472 )
1473 15980it [04:45, 55.97it/s]
1474 ['irrelevant not related']
```

```
1475 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-7e1238d9ca14a11e/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1476 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1477 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 143.72it/s]
1478 100%|██████████| 1/1 [00:00<00:00, 99.59it/s]
1479 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
7e1238d9ca14a11e/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1480 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1481 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-54330f808fecbdc1/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1482 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 127.84it/s]
1483 100%|██████████| 1/1 [00:00<00:00, 82.98it/s]
1484 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
54330f808fecbdc1/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1485 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1486 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 113.83it/s]
1487 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-1e24f1215e13d852/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
```

```
1488 100%|██████████| 1/1 [00:00<00:00, 83.35it/s]
1489 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
1e24f1215e13d852/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1490 Downloading data files: 100%|██████████| 1/1 [00:00
<00:00, 951.52it/s]
1491 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-85160a539888f5d2/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1492 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 125.36it/s]
1493 100%|██████████| 1/1 [00:00<00:00, 99.62it/s]
1494 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
85160a539888f5d2/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1495 t is : 9
1496 addlen is: 4500
1497 noexp_df.shape[0] last 6741
1498 unexplained dataset length is:
1499 6741
1500 embedding begin
1501 trian and val dataset length: 123120
1502 us_add_1_818
1503 us_add_1_818
1504 us_add_1_818
1505 us_add_1_818
1506 us_add_1_818
1507 us_add_1_818
1508 us_add_1_818
1509 us_add_1_818
1510 684.0
1511 ./embeddings/NEW_bertie_embeddings_textattack/bert-
base-uncased-MNLI_subset_1.pt
```

```
1512 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ba164b778eb30a12/0
    .0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1)
1513 100%|██████████| 1/1 [00:00<00:00, 1008.97it/s]
1514 test len 28890
1515 Downloading data files: 100%|██████████| 1/1 [00:00
    <, ?it/s]
1516 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 136.21it/s]
1517 Generating train split: 0 examples [00:00, ?
    examples/s]Downloading and preparing dataset csv/
    default to C:/Users/admin/.cache/huggingface/
    datasets/csv/default-e35807da18a19005/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1...
1518 100%|██████████| 1/1 [00:00<00:00, 76.59it/s]
1519 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    e35807da18a19005/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1. Subsequent calls will reuse this
    data.
1520 preprocess_samples begin ...
1521 uncertainty shape: 1530
1522 ./test_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
1523 Found cached dataset csv (C:/Users/admin/.cache/
    huggingface/datasets/csv/default-ca5df4ccf35536d3/0
    .0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1)
1524 100%|██████████| 1/1 [00:00<00:00, 666.61it/s]
1525 val len 14454
1526 Downloading and preparing dataset csv/default to C
    :/Users/admin/.cache/huggingface/datasets/csv/
    default-7ea007830a7dbe75/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1...
1527 Downloading data files: 100%|██████████| 1/1 [00:00
```

```
1527 <00:00, 1990.65it/s]
1528 Extracting data files: 100%|██████████| 1/1 [00:00<
    00:00, 104.86it/s]
1529 100%|██████████| 1/1 [00:00<00:00, 76.92it/s]
1530 Dataset csv downloaded and prepared to C:/Users/
    admin/.cache/huggingface/datasets/csv/default-
    7ea007830a7dbe75/0.0.0/
    6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
    53bcc7ec513e1. Subsequent calls will reuse this
    data.
1531 preprocess_samples begin ...
1532 uncertainty shape: 720
1533 ./val_embeddings/NEW_bertie_embeddings_textattack/
    bert-base-uncased-MNLI_subset_1.pt
1534 classify begin
1535 6908
1536     0%          | 0/20 [00:00<?, ?it/s]us_add_1_818
1537 us_add_1_818
1538 788it [00:09, 461.98it/s]us_add_1_818
1539 us_add_1_818
1540 us_add_1_818
1541 us_add_1_818
1542 1649it [00:24, 410.25it/s]us_add_1_818
1543 us_add_1_818
1544 us_add_1_818
1545 us_add_1_818
1546 2516it [00:38, 373.99it/s]us_add_1_818
1547 us_add_1_818
1548 us_add_1_818
1549 us_add_1_818
1550 3400it [00:53, 443.48it/s]us_add_1_818
1551 us_add_1_818
1552 us_add_1_818
1553 us_add_1_818
1554 4270it [01:10, 334.38it/s]us_add_1_818
1555 us_add_1_818
1556 us_add_1_818
1557 4276it [01:23, 13.91it/s] us_add_1_818
1558 5066it [01:24, 369.35it/s]us_add_1_818
1559 us_add_1_818
1560 us_add_1_818
```

```
1561 us_add_1_818
1562 5918it [01:39, 340.93it/s]us_add_1_818
1563 us_add_1_818
1564 us_add_1_818
1565 us_add_1_818
1566 6774it [01:53, 390.56it/s]us_add_1_818
1567 us_add_1_818
1568 us_add_1_818
1569 us_add_1_818
1570 7639it [02:08, 397.72it/s]us_add_1_818
1571 us_add_1_818
1572 us_add_1_818
1573 us_add_1_818
1574 8536it [02:23, 434.03it/s]us_add_1_818
1575 us_add_1_818
1576 us_add_1_818
1577 8551it [02:36, 12.65it/s] us_add_1_818
1578 9345it [02:37, 402.67it/s]us_add_1_818
1579 us_add_1_818
1580 us_add_1_818
1581 us_add_1_818
1582 10230it [02:52, 425.38it/s]us_add_1_818
1583 us_add_1_818
1584 us_add_1_818
1585 10261it [03:05, 14.00it/s] us_add_1_818
1586 11087it [03:06, 421.14it/s]us_add_1_818
1587 us_add_1_818
1588 us_add_1_818
1589 us_add_1_818
1590 11926it [03:21, 357.35it/s]us_add_1_818
1591 us_add_1_818
1592 us_add_1_818
1593 11971it [03:34, 16.41it/s] us_add_1_818
1594 12801it [03:35, 419.02it/s]us_add_1_818
1595 us_add_1_818
1596 us_add_1_818
1597 us_add_1_818
1598 13644it [03:49, 355.51it/s]us_add_1_818
1599 us_add_1_818
1600 us_add_1_818
1601 us_add_1_818
```

```
1602 14528it [04:04, 398.18it/s]us_add_1_818
1603 us_add_1_818
1604 us_add_1_818
1605 us_add_1_818
1606 15373it [04:18, 387.01it/s]us_add_1_818
1607 us_add_1_818
1608 us_add_1_818
1609 us_add_1_818
1610 16192it [04:33, 389.03it/s]us_add_1_818
1611 us_add_1_818
1612 us_add_1_818
1613 16246it [04:46, 16.03it/s] us_add_1_818
1614 17094it [04:47, 458.30it/s]us_add_1_818
1615 us_add_1_818
1616 epoch number 19
1617 us_add_1_818
1618 us_add_1_818
1619 us_add_1_818
1620 us_add_1_818
1621 global t is : 9
1622 test epoch results {'accuracy': 0.6084967320261437
, 'f1_weighted': 0.5762365096550569, 'f1_macro': 0.
4902056409831247, 'f1': array([0.83618582, 0.
26923077, 0.52272727, 0.28571429, 0.63276836,
1623 0. , 0.65068493, 0.62851782, 0.
58602151]), 'precision': array([0.79906542, 0.
46666667, 0.58974359, 0.62162162, 0.52996845,
1624 0. , 0.80508475, 0.54560261, 0.
61931818]), 'recall': array([0.87692308, 0.18918919
, 0.46938776, 0.18548387, 0.78504673,
1625 0. , 0.54597701, 0.74115044, 0.
55612245])}
1626 val epoch results {'accuracy': 0.6458333333333334
, 'f1_weighted': 0.5943718239738575, 'f1_macro': 0.
4362581548586514, 'f1': array([0.85972851, 0
. , 0.55555556, 0.11627907, 0.51428571,
1627 0. , 0.65648855, 0.7275321 , 0.
4964539 ]), 'precision': array([0.81896552, 0
. , 0.625 , 0.55555556, 0.38571429,
1628 0. , 0.76785714, 0.61893204, 0.
71428571]), 'recall': array([0.9047619 , 0
```

```
1628 . , 0.5 , 0.06493506, 0.77142857,
1629 0. , 0.57333333, 0.88235294, 0.
38043478])}
1630 17100it [05:03, 56.40it/s]
1631 uncertainty new embedding 6741
1632 uncertainty len embdedding 6741
1633 MLP_1h(
1634     (l1): Linear(in_features=54, out_features=100,
bias=True)
1635     (l2): Linear(in_features=100, out_features=9,
bias=True)
1636 )
1637 []
1638 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-9e2a5e21e236aec4/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1639 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1640 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 124.14it/s]
1641 100%|██████████| 1/1 [00:00<00:00, 99.62it/s]
1642 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
9e2a5e21e236aec4/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1. Subsequent calls will reuse this
data.
1643 Downloading data files: 100%|██████████| 1/1 [00:00
<, ?it/s]
1644 Downloading and preparing dataset csv/default to C
:/Users/admin/.cache/huggingface/datasets/csv/
default-da13ad8cbf79b9f4/0.0.0/
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8
53bcc7ec513e1...
1645 Extracting data files: 100%|██████████| 1/1 [00:00<
00:00, 141.75it/s]
1646 100%|██████████| 1/1 [00:00<00:00, 79.73it/s]
1647 Dataset csv downloaded and prepared to C:/Users/
admin/.cache/huggingface/datasets/csv/default-
```

```
1647 da13ad8cbf79b9f4/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1648 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1649 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 131.15it/s]  
1650 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-25b9b9faed2e3d3c/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1651 100%|██████████| 1/1 [00:00<00:00, 100.00it/s]  
1652 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
25b9b9faed2e3d3c/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1653 Downloading data files: 100%|██████████| 1/1 [00:00  
<, ?it/s]  
1654 Extracting data files: 100%|██████████| 1/1 [00:00<  
00:00, 124.79it/s]  
1655 Generating train split: 0 examples [00:00, ?  
examples/s]Downloading and preparing dataset csv/  
default to C:/Users/admin/.cache/huggingface/  
datasets/csv/default-581be4e2a1c9976f/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1...  
1656 100%|██████████| 1/1 [00:00<00:00, 90.93it/s]  
1657 Dataset csv downloaded and prepared to C:/Users/  
admin/.cache/huggingface/datasets/csv/default-  
581be4e2a1c9976f/0.0.0/  
6954658bab30a358235fa864b05cf819af0e179325c740e4bc8  
53bcc7ec513e1. Subsequent calls will reuse this  
data.  
1658 t is : 10  
1659 addlen is: 5000  
1660
```

```
1661 Process finished with exit code 0
```

```
1662
```