

```
from tiktoken.load import data_gym_to_mergeable_bpe_ranks, load_tiktoken_bpe
tiktoken / tiktoken_ext / openai_public.py
                                                                                                                                                                                                                                                                                                                                                                                             ↑ Top
                                                                                                                                                                                                                                                                                                                                                                                                                  Symbols
                                                                                                                                                                                                                                                                                                                                                                                                                   Find definitions and references for functions and other symbols in this file
                                                                                                                                                                                                                                                                                                                                                           (Raw [□ ± ] ( / ▼ ) [○]
                Blame 127 lines (112 loc) · 4.53 KB
Code
                                                                                                                                                                                                                                                                                                                                                                                                                   by clicking a symbol below or in the code.
                  FIM_SUFFIX = "<|fim_suffix|>"
                                                                                                                                                                                                                                                                                                                                                                                                                     = Filter symbols
                  ENDOFPROMPT = "<|endofprompt|>"
                                                                                                                                                                                                                                                                                                                                                                                                                     const ENDOFTEXT
     10 ∨ def gpt2():
                                                                                                                                                                                                                                                                                                                                                                                                                     const FIM_PREFIX
     11
                         mergeable_ranks = data_gym_to_mergeable_bpe_ranks(
                                                                                                                                                                                                                                                                                                                                                                                                                      const FIM_MIDDLE
                               vocab_bpe_file="https://openaipublic.blob.core.windows.net/gpt-2/encodings/main/vocab.bpe",
      12
     13
                               encoder_json_file="https://openaipublic.blob.core.windows.net/gpt-2/encodings/main/encoder.json",
                                                                                                                                                                                                                                                                                                                                                                                                                      const FIM_SUFFIX
                                vocab_bpe_hash="1ce1664773c50f3e0cc8842619a93edc4624525b728b188a9e0be33b7726adc5",
      14
                                                                                                                                                                                                                                                                                                                                                                                                                      const ENDOFPROMPT
                                encoder_json_hash="196139668be63f3b5d6574427317ae82f612a97c5d1cdaf36ed2256dbf636783",
      15
      16
                                                                                                                                                                                                                                                                                                                                                                                                                      func gpt2
     17
                         return {
                                                                                                                                                                                                                                                                                                                                                                                                                      func r50k_base
      18
                               "name": "gpt2",
      19
                               "explicit_n_vocab": 50257,
                                                                                                                                                                                                                                                                                                                                                                                                                      func p50k_base
      20
                               # The pattern in the original GPT-2 release is:
     21
                               # r"""'s|'t|'re|'ve|'m|'ll|'d| ?[\p{L}]+| ?[\p{N}]+| ?[^\s\p{N}]+|\s+(?!\S)|\s+"""
                                                                                                                                                                                                                                                                                                                                                                                                                      func p50k_edit
      22
                               # This is equivalent, but executes faster:
                                                                                                                                                                                                                                                                                                                                                                                                                     func cl100k_base
     23
                                \label{eq:pat_str} $$ p_{L}+| ?p_{N}+| ?[^s]+|^s+(?!\s)|^s+""", $$ p_{L}\p_{N}]+|^s+(?!\s)|^s+""", $$ p_{L}\p_{N}]+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_{L}\p_{N})+|^s+(p_
                                "mergeable_ranks": mergeable_ranks,
     24
                                                                                                                                                                                                                                                                                                                                                                                                                     func o200k_base
                                "special_tokens": {ENDOFTEXT: 50256},
     25
                                                                                                                                                                                                                                                                                                                                                                                                                      const ENCODING_CONSTRUCT...
     26
     27
     28
     29 🗸
                 def r50k_base():
      30
                         mergeable_ranks = load_tiktoken_bpe(
     31
                               "https://openaipublic.blob.core.windows.net/encodings/r50k_base.tiktoken",
     32
                               expected_hash="306cd27f03c1a714eca7108e03d66b7dc042abe8c258b44c199a7ed9838dd930",
     33
      34
                         return {
                                "name": "r50k_base",
     35
                               "explicit_n_vocab": 50257,
      36
     37
                                "pat_str": r"""'(?:[sdmt]|ll|ve|re)| ?\p{L}+| ?\p{N}+| ?[^\s\p{L}\p{N}]+|\s+(?!\S)|\s+""",
      38
                                "mergeable_ranks": mergeable_ranks,
                                "special_tokens": {ENDOFTEXT: 50256},
     39
      40
     41
      43 ∨ def p50k_base():
     44
                         mergeable_ranks = load_tiktoken_bpe(
      45
                                "https://openaipublic.blob.core.windows.net/encodings/p50k_base.tiktoken",
                                expected_hash="94b5ca7dff4d00767bc256fdd1b27e5b17361d7b8a5f968547f9f23eb70d2069",
      46
      47
      48
                         return {
      49
                                "name": "p50k_base",
      50
                               "explicit_n_vocab": 50281,
                                "pat_str": r"""'(?:[sdmt]|ll|ve|re)| ?\p{L}+| ?\p{N}+| ?[^\s\p{N}]+|\s+(?!\S)|\s+""",
     51
      52
                                "mergeable_ranks": mergeable_ranks,
     53
                                "special_tokens": {ENDOFTEXT: 50256},
      54
     55
     56
     57 \vee def p50k_edit():
     58
                         mergeable_ranks = load_tiktoken_bpe(
     59
                                "https://openaipublic.blob.core.windows.net/encodings/p50k_base.tiktoken",
```

1/2  $https://github.com/openai/tiktoken/blob/main/tiktoken\_ext/openai\_public.py\\$ 

```
expected_hash="94b5ca7dff4d00767bc256fdd1b27e5b17361d7b8a5f968547f9f23eb70d2069",
 60
61
 62
            special_tokens = {ENDOFTEXT: 50256, FIM_PREFIX: 50281, FIM_MIDDLE: 50282, FIM_SUFFIX: 50283}
 63
            return {
                "name": "p50k_edit",
64
 65
                "pat_str": r"""'(?:[sdmt]|ll|ve|re)| ?\p{L}+| ?\p{N}+| ?[^\s\p{L}\p{N}]+|\s+(?!\s)|\s+""",
                "mergeable_ranks": mergeable_ranks,
67
                "special_tokens": special_tokens,
68
 69
70
71 ∨ def cl100k_base():
72
            mergeable_ranks = load_tiktoken_bpe(
                "https://openaipublic.blob.core.windows.net/encodings/cl100k_base.tiktoken",
73
74
                expected_hash="223921b76ee99bde995b7ff738513eef100fb51d18c93597a113bcffe865b2a7",
75
76
            special_tokens = {
77
                ENDOFTEXT: 100257,
 78
                FIM_PREFIX: 100258,
 79
               FIM_MIDDLE: 100259,
 80
                FIM_SUFFIX: 100260,
81
                ENDOFPROMPT: 100276,
 82
83
           return {
84
                "name": "cl100k_base",
 85
               "pat\_str": r"""'(?i:[sdmt]|ll|ve|re)|[^\r\n\p\{L\}\p\{N\}]?+\p\{L\}+|\p\{N\}\{1,3\}| ?[^\s\p\{L\}\p\{N\}]++[\r\n]*|\s*[\r\n]|\s+(?!\S)|\s+""", respectively.
 86
                "mergeable_ranks": mergeable_ranks,
87
                "special_tokens": special_tokens,
88
 89
90
91 ∨ def o200k_base():
92
            mergeable_ranks = load_tiktoken_bpe(
93
                "https://openaipublic.blob.core.windows.net/encodings/o200k_base.tiktoken",
                expected_hash="446a9538cb6c348e3516120d7c08b09f57c36495e2acfffe59a5bf8b0cfb1a2d",
94
 95
 96
            special_tokens = {
97
                ENDOFTEXT: 199999,
 98
                ENDOFPROMPT: 200018,
 99
100
           # This regex could be made more efficient
101
           pat_str = "|".join(
102
103
                     r'''''[^\r]_{L}^{N}]?[\p\{Lu\}\p\{Lt\}\p\{Lm\}\p\{Lt\}\p\{Lm\}\p\{Lo\}\p\{M\}] + (?i:'s|'t|'re|'ve|'m|'ll|'d)?'''', 
104
                     r'''''[^\rn\}{L}\p{Lu}\p{Lt}\p{Lm}\p{Lo}\p{Lm}\p{Lo}\p{M}]*(?i:'s|'t|'re|'ve|'m|'ll|'d)?''''', 
105
                    r"""\p{N}{1,3}""",
106
                    r""" ?[^\s\p{L}\p{N}]+[\r\n/]*""",
107
                    r"""\s*[\r\n]+""",
108
                    r"""\s+(?!\S)""",
109
                    r"""\s+""",
110
111
112
113
               "name": "o200k_base",
114
               "pat_str": pat_str,
115
                "mergeable_ranks": mergeable_ranks,
116
                "special_tokens": special_tokens,
117
118
119
       ENCODING_CONSTRUCTORS = {
120 🗸
121
           "gpt2": gpt2,
122
           "r50k_base": r50k_base,
123
           "p50k_base": p50k_base,
124
           "p50k_edit": p50k_edit,
125
           "cl100k_base": cl100k_base,
           "o200k_base": o200k_base,
126
127
```

https://github.com/openai/tiktoken\_ext/openai\_public.py

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