Detection

Precision

0.975

0.531

0.889

0 979

1

1

0.952

1

Recall

0.78

0.86

0.8

0.92

1

0.28

0.4

0.44

Accuracy

0.87

0.51

0.92

0.96

0.98

0.7

0.73

0.74

F1 score

0.867

0.656

0.842

0 948

1

0.438

0.563

0.611

Accuracy

0.88

0.55

0.85

0.95

1

0.64

0.69

0.72

Layer

model.layers.14.mlp Vietnamese

model.layers.14.mlp Vietnamese

model.layers.14.mlp Vietnamese

model.lavers.14.mlp Vietnamese

model.layers.15.mlp Vietnamese

model.layers.15.mlp Vietnamese

model.layers.15.mlp Vietnamese

model.lavers.15.mlp Vietnamese

Lang

Feature ID

73696

111142

121534

130249

489

56098

92076

114319

linguistic contexts.

morphemes.

sentence.

Interpretation

information, actions, or attributes within sentences. These tokens

frequently correspond to the main subject, object, or action, and sometimes to quantifiers, time expressions, or locations, reflecting the core informational structure of Vietnamese text.

The highlighted tokens are primarily function words, grammatical particles, and common morphemes from multiple languages, including Vietnamese. Thai. Hindi. Russian. French. and Spanish.

The important tokens are primarily sentence-ending punctuation, quotation marks, and common Vietnamese word endings or

particles, often marking the boundaries of sentences, clauses, or

quoted speech, as well as frequent grammatical or functional

The highlighted tokens are primarily Vietnamese words and phrases, often marking key nouns, verbs, or descriptive elements within sentences. These tokens frequently denote important actions, objects, or attributes, and sometimes include

grammatical particles or function words that are essential for

sentence structure. The activations tend to focus on semantically significant content words and occasionally on connectors or modifiers that clarify relationships or provide context within the

The highlighted tokens are predominantly Vietnamese function words, noun phrases, and key content words that structure

sentences, indicate relationships, or specify important entities and actions, often marking organizational, procedural, or descriptive information within formal or informational contexts.

The highlighted tokens are primarily Vietnamese morphemes, syllables, or word segments, often marking the start, end, or core of words and phrases. They frequently correspond to meaningful units in Vietnamese grammar or vocabulary, such as nouns, verbs,

adjectives, or function words, and sometimes appear at points of

syntactic or semantic importance within sentences. The activations also include some English morphemes and punctuation, but the dominant pattern is the focus on

The highlighted tokens are primarily Vietnamese words and morphemes that form key components of noun phrases, time expressions, geographic locations, and institutional or organizational names. These tokens often mark the boundaries or

heads of important entities, such as countries, cities, months, organizations, or significant events, and are frequently used in formal or encyclopedic contexts to convey factual or structural

The highlighted tokens are primarily Vietnamese words and morphemes that serve as key components in forming noun phrases, verb phrases, and expressing grammatical relationships.

These tokens often include function words, affixes, and highfrequency content words that are essential for sentence structure, topic indication, or semantic emphasis within

conversational or descriptive contexts.

Vietnamese linguistic units.

information

The highlighted tokens are primarily Vietnamese words and phrases that represent key semantic units such as nouns, verbs, adjectives, and named entities, often marking important

These tokens often serve as connectors, case markers, prepositions, conjunctions, pronouns, or inflectional endings, and are essential for sentence structure and meaning across diverse

Fuzzing

F1 score Precision

0.851

0.642

0.925

0.958

0.98

0.583

0.64

0.649

0.506

0.875

1

0.962

0.955

0.96

1

Recall

0.74

0.88

0.98

0 92

0.42

0.48

0.48