

Project Boundary (Version: 2)

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Abstract

This is a sub-project of "Data Re-Compression". In this project, function for different "Sequence" will be defined.

1 Sequence

Sequence is group of different symbols, which are related to each other. When any data will be encoded for "Data Re-compression, it will be in form of "Sequence".

1.1 Level-I Sequence:

when single variable will be use in function

$$f(x) = x^2 + 3, \quad x \in [1, 10]$$

1.2 Level-II Sequence:

when multiple variable will be use in function

$$f(x) = x+y+z, \quad x \in [-\infty, +\infty], \quad y \in [1.5, 2.0], \quad z \in [-100, +100], \quad f(x) \in [-90, +1000]$$

1.3 Level-III Sequence:

when two or more function will be use for generate a single-Sequence

$$f(x) = x^3, \quad g(x) = 2x, \quad h(x) = \sqrt[4]{x}$$
$$S = f(x) + g(x) + h(x)$$

1.4 Level-IV Sequence:

when composite function will be used for generate a Sequence.

$$f(x) = 2x^2, \quad g(x) = 3x + 7, \quad h(x) = 2\sqrt{x}$$

The composite function is:

$$f(g(h(x))) = 2x^2$$

2 Main Work

2.1 Text Boundary

For a book: one page will be encoded as "Sequence" and "Formula" will be find for this. This sequence will contain 20,000 terms.

For other text: one chunk can be taken less than 20,000 or it can choose by size, like 1 byte, 1 kb, or other size.

2.2 Image Boundary

one image can be directly process, or can be chunk by size or any constant number.

2.3 Video boundary

each scene will be process.

2.4 Other files

Chunk and process.

3 Three Major Problem of Boundary

3.1 Creation:

It will be done in following way-

- (a). Per Sequence formula form
- (b). Algorithm based formula form

3.2 Store:

This three point gives systematic order to store boundary-

- (a). Sequence Store
- (b). Formula Form Store
- (c). Unique ID and Ranking of Sequence Store

3.3 Access:

Interact with any boundary is also a complex job which should be optimized for performance-

- (a). Access Algorithm (Classical matching function)
- (b). Expert Agent (AI Model)

4 Predefined Sequence

This is labeled data (well known Sequences and its Formula Form), that should be recognized by ”**Whole LTDC**” Community. It will be used in analysis and Creation of Formula Form.

5 A Master Algorithm Function

$$f(x, y) = x^{\sin y}, \quad (x, y) \in N$$

Here, x,y can be different set.

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