**A System to Organize and Display Data Group**

**with Feature Footprints Correlation**

Declare:

1. Process to remove data noise and unify data format
2. A procedure to generate a set of sub-data, called feature footprints for any given data block or a set of data blocks, called data group
3. For a given set of footprints, a procedure to rank a set of data blocks based on their footprints.

The system includes the following key components:

1. A data block, or a data group, is represented by a set of feature footprints.
2. The feature footprints extract the given data block or group key features.
3. Procedure to preprocess of a collection of data blocks, called data cleaning (e.g., noise removal, unifying format, space mapping etc.)
4. Data cleaning is essential to generate a set of meaningful feature footprints for any given data block or group.
5. Calculate the correlation between any two data blocks based on their feature footprints.
6. User interfaces to display data blocks with correlation

Group X: Subject Name

User Interface for One Group Display

(In the order based on their correlation to Group X)

Button to get blocks correlated to block k

Button to get blocks correlated to block 2

Button to get blocks correlated to block 1

Block k:

This is the block k.

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Data Block 2:

This is the block 2.

Data Block 1:

This is the block 1.

User Interface for Blocks Correlated to the Used Selected Block

(in order based on their correlation to the selected block)

Button to get blocks correlated to block k

Button to get blocks correlated to block 2

Button to get blocks correlated to block 1

Block k:

This is the block k.

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Block 2:

This is the block 2.

Block 1:

This is the block 1.

Blocks correlated to the selected block

Raw Data Block

Raw Data Block

Raw Data Block

Calculators:

* Group feature footprints
* Individual feature footprints
* Correlations

User Interfaces:

* Group display
* Correlated inquiry

Pre-processors:

* Noise removal
* Unifying format
* Space mapping

A System to Organize and Display Data Group with Correlation

Data Block

Data Block

Data Block