

DRAWINGS

Acquire unstructured data by an intelligent data collector; construct a data feature fingerprint library; perform classification and labelling on the unstructured data based on the data feature fingerprint library to obtain classified and labelled data; construct a data quality assessment model by an incremental learning algorithm, the data quality assessment model scoring the classified and labelled data from three dimensions of data integrity, timeliness and value density to obtain a scoring result; and construct a priority processing queue according to the scoring result, and perform data cleaning and standardized processing on the classified and labelled data in the priority processing queue to obtain a standardized training data set

S101

Perform deep learning processing on the standardized training data set by a multi-level cascade network structure, the multi-level cascade network structure identifying target features in the standardized training data set through a self-attention mechanism according to class information of the classified and labelled data; construct a feature association graph based on the target features; construct a bidirectional inference channel on the feature association graph, the bidirectional inference channel including a forward channel and a reverse channel, the forward channel extracting numerical distribution features, time-order features and attribute features in the standardized training data set by a convolutional neural network so as to obtain dominant feature data, and the reverse channel extracting data item association rules, data change trends and data interaction modes in the standardized training data set through a recurrent neural network so as to obtain recessive feature data; and perform feature combination on the dominant feature data and the recessive feature data by a dynamic weight allocation strategy to obtain a multi-dimensional feature tensor

S102

Perform rule matching on the multi-dimensional feature tensor based on a preset domain knowledge base to obtain an inference rule set; perform hierarchical processing on the multi-dimensional feature tensor by the inference rule set so as to obtain initial structured data; analyze the initial structured data by a causal inference method to obtain a decision basis chain; generate optimization parameters based on the decision basis chain; and perform optimization processing on the initial structured data according to the optimization parameters and the class information of the classified and labelled data to obtain final structured data

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FIG. 1

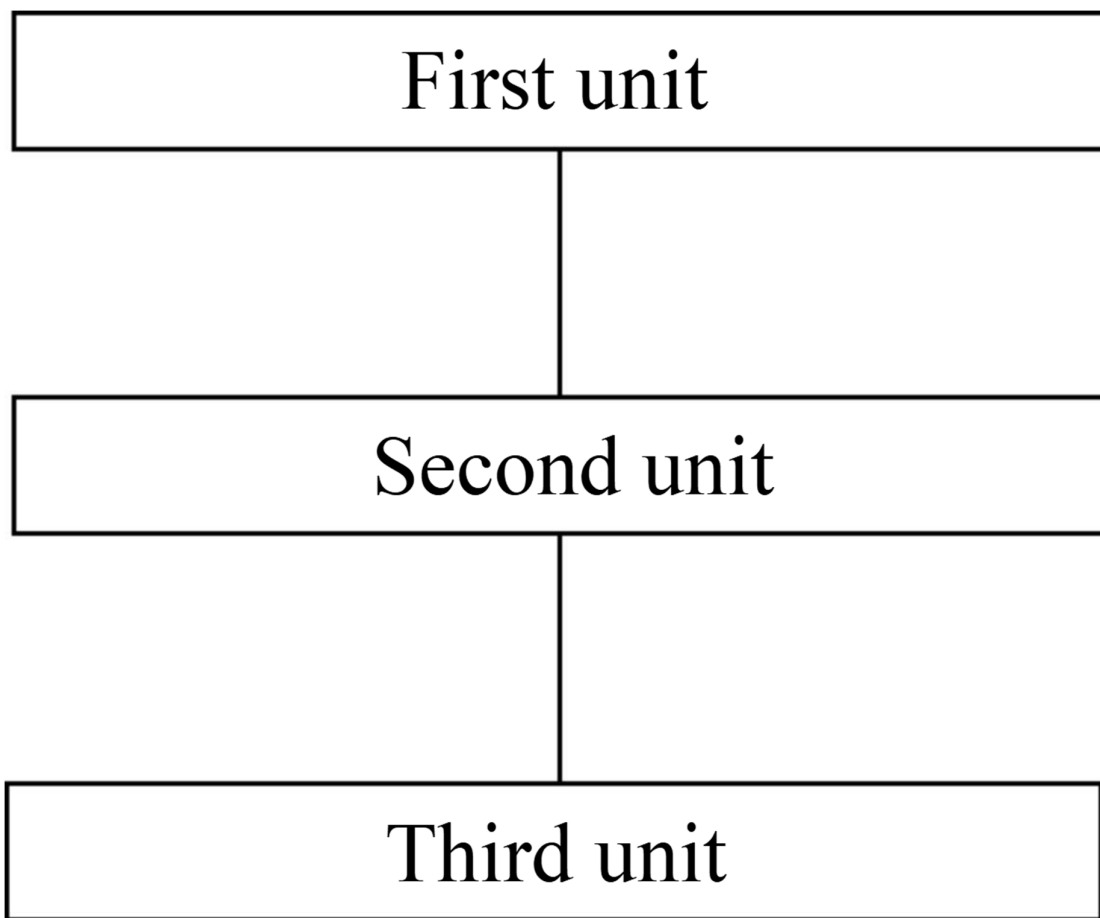


FIG. 2