

GBDT MODEL FEATURE INTERPRETATION METHOD AND APPARATUS

ABSTRACT

Implementations of the present specification disclose methods and apparatuses
5 for obtaining a feature interpretation of a predicted label value of a user. The method
is performed after a prediction of a label value of the user is generated by using a
GBDT model, and includes the following: separately obtaining, from a predetermined
quantity of decision trees ranked among the top decision trees, a leaf node including
the user and a score of the leaf node; determining a respective prediction path of each
10 leaf node; obtaining a split feature and a score of each parent node on each prediction
path; determining, for each child node on each prediction path, a feature
corresponding to the child node and a local increment of the feature on the child node;
obtaining a collection of features respectively corresponding to all child nodes as the
multiple features relevant to the predicted label value of the user; and obtaining, by
15 computing a sum of a local increment of the feature of at least one of the child nodes
that corresponds to a same feature, a respective measure of relevance between the
feature corresponding to the at least one child node and the predicted label value.

20 FIG. 1