

MODEL TRAINING METHODS, APPARATUSES, AND SYSTEMS

ABSTRACT

The present disclosure provides a method and apparatus for training a linear/logistic regression model. The method includes: performing the following iterative process until a predetermined condition is satisfied: using secret sharing matrix addition based on a current sub-model of each training participant and a corresponding feature sample subset to obtain a current prediction value of the linear/logistic regression model for a feature sample set; determining a prediction difference between the current prediction value and a corresponding label, and sending the prediction difference to each second training participant, so at each second training participant, a current sub-model of the second training participant is updated; and updating a current sub-model of a first training participant based on the current sub-model of the first training participant and a product of a corresponding feature sample subset and the determined prediction difference. When the iterative process does not end, the updated current sub-model of each training participant is used as a current sub-model of a next iterative process. The method can improve model training efficiency while ensuring data security of all parties.

FIG. 3