PRIVACY-PRESERVING GRAPHICAL MODEL TRAINING METHODS, APPARATUSES, AND DEVICES

ABSTRACT

Some embodiments of this specification disclose privacy-preserving graphical model training methods, apparatuses, and devices, where the method is applied to a terminal device and includes: acquiring node information of a to-be-constructed first graph, and node information and node connection information of a second graph; constructing the first graph by using a predetermined fully connected network based on the node information of the first graph, constructing the second graph by using a predetermined graph network based on the node information and the node connection information of the second graph, and constructing first sample data based on a latent vector of a first node and training label information corresponding to the first node; respectively generating corresponding training label information for a second node in the first graph and a node in the second graph, and constructing second sample data based on latent vectors of the second node and the node in the second graph and the generated training label information; and performing model training on a graphical model based on the first sample data and the second sample data, acquiring corresponding gradient information, and sending the gradient information to a server.

[FIG. 1A]