

FEDERATED TRAINING METHOD AND APPARATUS, AND COMPUTER SYSTEM

说明书摘要

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本说明书实施例提供了一种联邦训练方法及装置，涉及中间方和 n 个参与方。该方法应用于所述中间方，所述方法涉及的任一轮迭代训练包括：首先，从所述 n 个参与方对应接收 n 个嵌入表征，其中各个嵌入表征由对应参与方利用本地模型处理对应当前一批次样本的本地特征而得到；接着，针对 m 个预测任务中任意的第一预测任务，利用对应部署的第一门控网络处理所述 n 个嵌入表征，得到 n 个第一权重；然后，利用对应部署的第一预测网络处理基于所述 n 个第一权重和 n 个嵌入表征而得到的加权嵌入表征，得到第一预测结果，用于确定本轮的训练损失。

Embodiments of this specification provide a federated training method and apparatus, involving an intermediate party and n participants. The method is applied to the intermediate party, and any round of iterative training involved in the method includes: first, correspondingly receiving n embedding representations from the n participants, where each embedding representation is obtained by a corresponding participant by processing a local feature corresponding to a current batch of samples by using a local model; and then for any first prediction task in m prediction tasks, processing the n embedding representations by using a corresponding deployed first gating network, to obtain n first weights; and then processing, by using a corresponding deployed first prediction network, a weighted embedding representation obtained based on the n first weights and the n embedding representations, to obtain a first prediction result, so as to determine a training loss in the current round.

(FIG. 1)