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➤ IDASH2017-master代码

Makefile C++工程项目 添加注释

Logistic Regression Model Training based on the Approximate Homomorphic Encryption

Andrey Kim, Yongsoo Song, Miran Kim, Keewoo Lee, and Jung Hee Cheon. SNU 2018

$$L = \begin{cases} \text{ITERNUM} \cdot (3p + 2p_c + 3) + L_0 & g = g_3, \\ \text{ITERNUM} \cdot (4p + 2p_c + 3) + L_0 & g \in \{g_5, g_7\}, \end{cases}$$

$$\text{ct}_z = \text{Enc} \begin{bmatrix} z_{10} & z_{11} & \cdots & z_{1f} \\ z_{20} & z_{21} & \cdots & z_{1f} \\ \vdots & \vdots & \ddots & \vdots \\ z_{n0} & z_{n1} & \cdots & z_{nf} \end{bmatrix}$$

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➤ simplified fixed Hessian method

C++ 编程实现

Privacy-Preserving Logistic Regression Training

Charlotte Bonte, and Frederik Vercauteren. [KU Leuven] 2018

Fix-Hessian method : Dankmar Böhning and Bruce G Lindsay 1988

Newton method : 海森矩阵不可逆, 求海森矩阵的逆计算量大

Böhning fix Hessian $H \geq B$ (where “ \geq ” denotes the Loewner ordering) + a lower bound

Charlotte Bonte simplify lower bound

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- 在明文上实现 simplified fixed Hessian method
验证所实现算法代码的逻辑正确无误
- 在IDASH2017-maste的C++工程项目上
实现经过验证的算法逻辑
- 并在密文上实现该算法逻辑

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