Differentially private modification of sign-SGD

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Course: My first scientific paper
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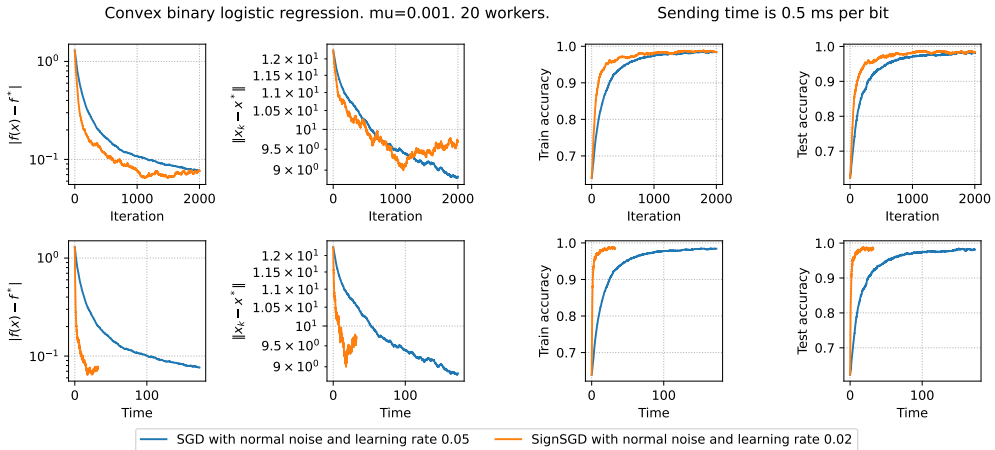
Goal of research

One-slide talk

Please comment all slides but this one if you make the One-slide talk.



Column 2

Column 1

The message.

Literature

Differential Privacy

Renyi differential privacy

Criterion of a private algorithm

Sample Gaussian Mechanism

Solution

Column 1

Column 2

Computational experiment

Conclusion

dp-sign SGD

- with Poisson sampling $q = 1/n$
- is $(10, 1/n^{1}.1)$ private
- empirically converges on logistic regression problem

Now we have to provide theoretical guarantees of convergence.