

NUMERICAL ANALYSIS AND SCIENTIFIC COMPUTING
SEMINAR

Randomized Fast Subspace Descent Methods

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Abstract: In this talk, we propose randomized fast subspace descent (rFASD) methods and derive its convergence analysis. An outline of rFASD is as follows. Randomly choose a subspace according to some sampling distribution and find a search direction in that subspace. The update is given by the subspace correction with such search direction and appropriated step-size. Convergence analysis for convex function and strongly convex function will be given. SGD, Coordinate Descent (CD), Block CD, and Block CD with Newton solver on each block can be viewed as examples in our framework. This is a joint work with Xiaozhe Hu and Huiwen Wu.

Friday, March 12, 2021, 1:30 pm
<https://emory.zoom.us/j/95900585494>

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