

## ADMM for Efficient Deep Learning with Global Convergence



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Research Track Poster# 104 see you on August 6th 7:00pm-9:30pm!

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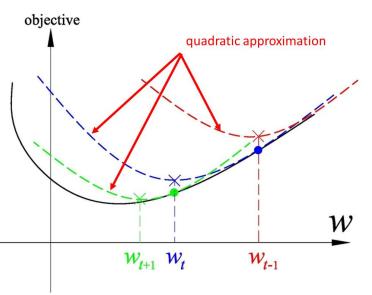
The code is available at

https://github.com/xianggebenben/dlADMM.

## The contributions of our paper:

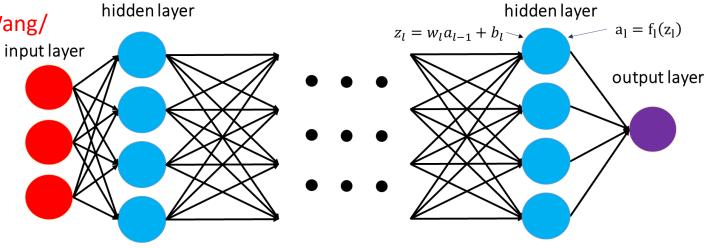
1. Update parameters backward and then forward to exchange information efficiently, so that the convergence can be accelerated.

2. Quadratic approximation technique is applied to avoid the matrix inversion when solving subproblems of ADMM.



 $a_l \to z_l \to b_l \to w_l$ 

1.update backward



2.update forward

3. The ADMM-type method is firstly proven by us to converge to a critical point of deep learning problems.

