Accepted Manuscript

Building Fast and Compact Convolutional Neural Networks for Offline Handwritten Chinese Character Recognition

Xuefeng Xiao, Lianwen Jin, Yafeng Yang, Weixin Yang, Jun Sun, Tianhai Chang

PII: S0031-3203(17)30255-8 DOI: 10.1016/j.patcog.2017.06.032

Reference: PR 6197

To appear in: Pattern Recognition

Received date: 16 February 2017 Revised date: 31 May 2017 Accepted date: 26 June 2017



Please cite this article as: Xuefeng Xiao, Lianwen Jin, Yafeng Yang, Weixin Yang, Jun Sun, Tianhai Chang, Building Fast and Compact Convolutional Neural Networks for Offline Handwritten Chinese Character Recognition, *Pattern Recognition* (2017), doi: 10.1016/j.patcog.2017.06.032

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- We propose a new method for building fast and compact CNN model for large scale handwritten Chinese character recognition (HCCR).
- We propose a new technique, namely Adaptive Drop-Weight (ADW), for effectively pruning CNN parameters.
- We proposed the Global Supervised Low Rank Expansions (GSLRE) method for accelerating CNN model.
- Comparing with the state-of-the-art CNN method for HCCR, our approach is about 30-times faster yet 10-times smaller.

Download English Version:

https://daneshyari.com/en/article/4969614

Download Persian Version:

https://daneshyari.com/article/4969614

<u>Daneshyari.com</u>