Shiming Chen

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https://github.com/shiming-chen

PERSONAL INFORMATION

Name: Shiming Chen   Gender: Male   Birthdate: Junary 15, 1992

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RESEARCH INTERESTS

Artification Intelligence, and in particular:

- Computer Vision

- Pattern Recognition

- Deep Learning

EDUCATION

- 2016.9-Present
  M.D. degree: Department of Computer Science and Technology, Guizhou University, China. Advisor: Professor Yisong Wang

- 2012.9-2016.7
  B.Sc. degree: Department of Information and Computing Science, Zunyi Medical University, China.

PUBLICATIONS

- **Shiming Chen**, Yisong Wang, Chin-Teng Lin, Weiping Ding and Zehong Cao. Semi-supervised Feature Learning For Improving Writer Identification, *Information Sciences*, 482 (2019) 156-170. doi:https://doi.org/10.1016/j.ins.2019.01.024.(**SCI/EI, IF=4.305, JCR Q1, CCF-B**)

- **Shiming Chen** and Yisong Wang. A Robust Off-line Writer Identification Method, *ACTA AUTOMATICA SINICA*, 2018,Accepted.doi:https://doi.org/10.16383/j.aas.c180441(In Chinese, **EI**, **CAA-A**)

PROFESSIONAL SERVICE

- 2018.10-Present
  Reviewer of *IEEE Access*.

PROFESSIONAL EXPERIENCES

- 2017.12-2018.5 **A Robust Off-line Writer Identification Method**. The current well-known off-line writer identification approaches are based on local feature extraction. They rely heavily on data augmentation and global encoding for writer retrieval, and need a great number of handwritten contents for writer recognition. I proposes a new off-line writer identification method, called DLS-CNN, which combines document line segmentation in terms of statistic and deep convolutional neural network. The implimentation is available at:https://github.com/shiming-chen/DLS-CNN

- 2018.5-2018.10 **Semi-Supervised Feature Learning for Improving Writer Identification**. Data augmentation is typically used by supervised learning approaches for offline writer identification, but such approaches require a mass of extra training data and potentially lead to overfitting errors. In this work, a semi-supervised feature learning pipeline was proposed to improve the performance of writer identification by training with extra unlabeled data and the original labeled data simultaneously. Specifically, we proposed a weighted label smoothing regularization (WLSR) method for data augmentation, which assigned the weighted uniform label distribution to the extra unlabeled data. The WLSR method could regularize the convolutional neural network (CNN) baseline to allow more discriminative features to be learned to represent the properties of different writing styles.The experimental results on well-known benchmark datasets (ICDAR2013 and CVL) showed that the proposed semi-supervised feature learning approach significantly improves the baseline measurement and perform competitively with existing writer identification approaches. This work provide new insights into offline writer identification.. The implimentation is available at:https://github.com/shiming-chen/Writer-Identification-WLSR

PROFESSIONAL SKILLS

- Programming Language: Python(proficient), Matlab(familar), C++(familar), C#(Familar)

- Deep Learning Frameworks: Tensorflow(proficient), Matconvnet(proficient), Pytorch(familar)

AWARDS AND CERTIFICATES

- CET 6 (471)

- 2014 China Undergraduate Mathematical Modeling Contest (Grade 2)

- 2017 Academic Scholarship (Grade 3)

- 2018 Special Grade Scholarship of Guizhou University