Shiming Chen

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https://github.com/KiM55

PERSONAL INFORMATION

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

Artification Intelligence, and in particular:

- Pattern Recognition

- Computer Vision

- 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.

PAPERS

- **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, IF=4.305, Q1**)

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

SERVICE

- 2018.6-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/KiM55/DLS-CNN

- 2018.5-2018.10 **Semi-Supervised Feature Learning for Improving Writer Identification**. Data augmentation is usually used by supervised learning approaches for offline writer identification, but such approaches require 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 implimentation is available at:https://github.com/KiM55/Writer-Identification-WLSR

- 2017.12-Present **Unlabeled Samples Generated by GAN for Improving Off-line Writer Identification**. In this work, we attempt to improve off-line writer identification using the unlabeled data generated by GAN. During training, we take WLSR to train the original labeled data and the generated unlabeled data simultaneously, which will regularize the model, and thus network will be directed to learn more discriminative features. The implimentation is available at:https://github.com/KiM55/Writer-Identification

PROFESSONAL SKILLS

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

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

AWARDS AND CERTIFICATS

- CET 6 (471)

- 2014 China Undergraduate Mathematical Modeling Contest (Grade 2)

- 2017 Academic Scholarship (Grade 3)

- 2018 Academic Scholarship (Grade 2)