Jianfeng Wang

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Address: Beijing, China

EDUCATION

- *Master of Engineering*   2013.9-2017.6
  Computer Technology
  Beijing University of Posts and Telecommunications (BUPT)

- *Bachelor of Science (BSc)*   2009.9-2013.6
  Telecommunications Engineering with Management
  Beijing University of Posts and Telecommunications (BUPT)
  Major GPA: 87.14 / 100
  Overall GPA: 85.10 / 100

- *Bachelor of Science (BSc)*   2009.9-2013.6
  Telecommunications Engineering with Management
  Queen Mary, University of London (QMUL), UK
  Joint Programme with BUPT

PUBLICATIONS

[1] Shikai Chen, **Jianfeng Wang**, Yuedong Chen, Zhongchao Shi, Xin Geng, Yong Rui
"*Auxiliary Task Guided Label Distribution Learning for Facial Expression Recognition*"
Under review, International Conference on Computer Vision (ICCV-19).

[2] Yuedong Chen, **Jianfeng Wang**, Shikai Chen, Zhongchao Shi, Jianfei Cai
"*Facial Motion Prior Networks for Facial Expression Recognition*"
Under review, IEEE International Conference on Visual Communications and Images Processing (VCIP-19).

[3] **Jianfeng Wang**, Xiaolin Hu
"*Convolutional Neural Networks with Gated Recurrent Connections*"
Under review, IEEE Trans on Pattern Analysis & Machine Intelligence (TPAMI).

[4] **Jianfeng Wang**, Xiaolin Hu
"*Gated Recurrent Convolution Neural Network for OCR*"
In Proc. of Advances in Neural Information Processing Systems (NIPS), 2017.
The source code and pre-trained model can be found at:
https://github.com/Jianfeng1991/GRCNN-for-OCR

[5] Haihong E, **Jianfeng Wang**, Meina Song, Qiang Bi, Yingyi Liu
"*Incremental Weighted Bipartite Algorithm for Large-scale Recommendation Systems*"
In Turkish Journal of Electrical Engineering & Computer Science, 2016.

INTERNSHIPS or WORKING EXPERIENCE

AI Lab Lenovo Research
Computer Vision Researcher   2017.7-present

- Project: Face Recognition

  - We studied deep learning and implemented a new combined angular margin loss for face recognition. The best single model trained on MsCele+VGGFace2 can achieve 99.87% on lfw and 86.36% on non-cleaned MegaFace.

  - We applied CycleGAN to generate eye glasses for each identity in order to augment the training data and eliminate the effect of eye glasses.

- We implemented MobileNet, MobileNet-v2, ShuffleNet and ShuffleNet-v2 for face recognition on mobile devices.
- We now investigating a new end-to-end transfer learning framework that is capable of dealing with training datasets subjecting to long-tail distribution.

- Project: Facial Expression Recognition (FER)
  - We proposed a Facial Motion Prior Networks which involves the facial motion mask for the FER task.
  - We proposed a new method that introduces related auxiliary tasks to guide the network to learn facial expressions.

- Project: Face Anti-Spoofing
  - We investigate new framework for face anti-spoofing problem.

State Key Laboratory of Intelligent Technology and Systems, Department of Computer Science and Technology, Tsinghua University.
Visiting Student, Supervised by Prof. Xiaolin Hu   2016.1-2017.6

- Project: Scene Text Recognition
  - We designed a CNN-based framework for scene text recognition.
  - We proposed a new network architecture which is called Gated Recurrent Convolution Neural Network for scene text recognition. The proposed model achieved state-of-the-art results on several benchmark datasets.

- Project: Object Recognition
  - We applied our GRCNN to object recognition task to verify its effectiveness. It obtained very competitive results on CIFAR, SVHN and ImageNet-2012.

- Project: Action Recognition in Videos
  - We studied the 3D convolution networks and LSTM for action recognition.
  - We implemented two-stream 3D recurrent convolution neural network for action recognition and obtained a comparable results on UCF-101 and HMDB-51

OTHER PROJECTS or EXPERIENCES

- Incremental Weighted Bipartite Network for Recommender System:
  - We proposed and implemented an incremental algorithm to update the weights efficiently in weighted bipartite network for recommender system.
- Collaborative filtering recommender system:
  - We implemented user-based algorithm and item-based algorithm for book recommendation in university.
- Text classification: we designed and implemented a system for text classification. It contains:
  - Chinese word segmentation
  - TF-IDF for feature representation
  - Naive Bayes for text classification.

MISCELLANEOUS

- **Academic Services:** Reviewer for ICML2019.

- **Toolbox:** Experienced with Torch, Caffe, Tensorflow.

- **Honors:** Second-class scholarship of the school (top 8%), Third-class scholarship of the school (top 10%).

- **Language:** IELTS 7.0
  Reading: 8.0, Listening: 7.5, Writing: 6.0, Speaking: 6.5