Jianfeng Wang

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EDUCATION

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

- *Bachelor of Engineering* 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

PUBLICATIONS

[1] **Jianfeng Wang**, Xiaolin Hu
"Gated Recurrent Convolution Neural Network"
Under review, IEEE Trans on Pattern Analysis & Machine Intelligence (TPAMI) 2018.

[2] **Jianfeng Wang**, Zhongchao Shi, Feiyu Xu
"Residual Temporal Recurrent Networks for Unsupervised Video Summarization"
Under review, Asian Conference on Computer Vision (ACCV), 2018.

[3] **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

[4] 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

Lenovo AI Lab
Computer Vision Researcher 2017.7-present

- Project: Face Recognition
  - We studied deep learning for face recognition. We implemented a new combined angular margin loss and applied GRCNN to face recognition. The code and MsCele+VGGFace2 pre-trained model can be found at:
    https://github.com/Jianfeng1991/GRCNN-for-Face
  - Implemented a CycleGAN to generate eye glasses for each identity. This method augments the training data and eliminates the effect of eye glasses.
  - Implemented MobileNet, MobileNet-v2, ShuffleNet and ShuffleNet-v2 that can be applied to mobile devices for face recognition.
  - We now investigate a new end-to-end transfer learning framework that is capable of dealing with the training datasets with long-tail distribution.
- Project: Facial Expression Recognition
  - We now investigate a new framework which extracts facial expression representation for recognition

State Key Laboratory of Intelligent Technology and Systems, Department of Computer Science and Technology, Tsinghua University.
Visiting Student, Supervised by Prof. Xiaolin Hu 2015.7-2017.6

- Project: Scene Text Recognition
  - 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:
  - Implemented user-based algorithm and item-based algorithm for book recommendation in university.
- Text classification: Designed and implemented a system for text classification. It contains:
  - Chinese word segmentation
  - TF-IDF for feature representation
  - Naive Bayes for text classification.

MISCELLANEOUS

- **Toolbox:** Experienced with Torch, Caffe, Tensorflow.
- **Honors:** Second-class scholarship of the school (top 8%), Third-class scholarship of the school (top 10%).