

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.

The source code and ImageNet-2012 pre-trained model will be released at:

[https://github.com/Jianfeng1991/GRCNN\\_object\\_recognition](https://github.com/Jianfeng1991/GRCNN_object_recognition)

[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%).