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Education

Beihang University	BEIJING, CHINA
Master degree in Pattern Recognition and Intelligent System	2014.9 – 2017.6
Advisor: Prof. Baochang Zhang	
GPA: 90/100	
Beihang University	BEIJING, CHINA
Bachelor degree in Automation Science and Electrical Engineering	2009.9 – 2013.6

Honors & Awards

- The First Prize of National Olympiad in Informatics in Provinces (NOIP) (2008)
 - The Second Prize of "Fengru Cup" Academic Scientific and Technological Works Competition (2012)
 - Beijing Outstanding Graduate Awards (2013)
 - National Scholarship for Graduate Students (2017)
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Publications

Transaction

- **Linlin Yang**, Ce Li, Jungong Han, Qixiang Ye, Chen Chen, Wanquan Liu and Baochang Zhang. Image Reconstruction via Manifold Constrained Convolutional Sparse Coding for Image Sets[J]. *IEEE Journal of Selected Topics in Signal Processing* (accepted).
- Baochang Zhang, Yun Yang, Chen Chen, **Linlin Yang**, Jungong Han and Ling Shao. Action Recognition Using 3D Histograms of Texture and A Multi-class Boosting Classifier[J]. *IEEE Transactions on Image Processing* (accepted).
- Baochang Zhang, **Linlin Yang**, Jungong Han, Vittorio Murino, Jianzhuang Liu, Linlin Shen, Alessio Del Bue. Manifold Constraint for Rotation Invariant Low Rank Decomposition[J]. *IEEE Transactions on Circuits and Systems for Video Technology* (submitted).

Conference

- **Linlin Yang**, Chen Chen, Hainan Wang, Baochang Zhang and Jungong Han. Adaptive Multi-class Correlation Filters[C]. *Proceedings of the Pacific-Rim Conference on Multimedia*. 2016 (published).
 - Xiangbo Su, Baochang Zhang, **Linlin Yang**, Zhigang Li and Yun Yang. Scale Invariant Kernelized Correlation Filter Based on Gaussian Output[C]. *Proceedings of the International Conference on Cloud Computing and Security*. 2016 (published).
 - Yun Yang, Baochang Zhang, **Linlin Yang**, Chen Chen and Wankou Yang. Action Recognition Using Completed Local Binary Patterns and Multiple-class Boosting Classifier[C]. *Asian Conference on Pattern Recognition*. 2015:336-340 (published).
 - **Linlin Yang**, Dandan Du, Baochang Zhang and Wankou Yang. A Panoramic Video System Based on Exposure Adjustment and Non-linear Fusion[C]. *Proceedings of the Chinese Conference on Biometric Recognition*. 2015:106-110 (published).
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Skills

Technical specialties:

Proficient: MATLAB/C++/LaTeX/OpenCV

Familiar: Python/Caffe/Linux/CVX/VLFeat/SPAMS

Languages:

Mandarin Chinese (*mother tongue*), English (TOEFL 83, *in preparation*)

Research Interests

Machine Learning, Computer Vision and Pattern Recognition. Especially 2D or 3D Reconstruction, Action Recognition and Real-time Image Processing.

Intern Experience

Beijing Terra Vision Technology Co.,Ltd.

Software Engineer

Participated in the development of airplane detection system

BEIJING, CHINA

2013.12 – 2014.6

Beijing Lamp Goldeneye Technology Co.,Ltd.

Algorithm Engineer

Researched on convolutional sparse coding

BEIJING, CHINA

2016.9 – 2017.3

Research Experience

Manifold Constraint

2016.7 - 2017.3

- Proposed manifold constraints to reduce noise and perturbation of the input.
- Presented a manifold based Alternating Direction Method of Multipliers (ADMM) framework to embed manifold priors into sparse representation-based classification (SRC) approaches.
- Employed manifold constraint for rotation invariant low rank decomposition and batch image problems.
- Theoretical results were derived showing that imposing manifold constraint on the input data was equivalent to imposing regularization terms on the coding process.

Adaptive Multi-class Correlation Filters

2016.3 - 2016.7

- Added multi-class constraints into correlation filters .
- Proposed an ADMM framework to calculate correlation filters with adaptive outputs.
- Applied the multi-class correlation filters for action recognition.

Action Recognition Using 3DoT and A Multi-class Boosting Classifier

2015.11 - 2016.9

- Proposed a multi-class boosting classifier with GMM assumption.
- Employed the new classifier for action recognition.

Scale Invariant Kernelized Correlation Filter Based on Gaussian Output

2015.7 - 2015.11

- Designed a long-term tracking scheme with Gaussian distribution assumption.
- Proposed a scale estimation method to find an accurate candidate.

Panoramic Video System

2015.5 - 2015.7

- Implemented a video stitching system based on the exposure adjustment and nonlinear fusion.

Please refer to [My Personal Website](#) for the full-text of my paper.
