Linlin Yang *Male* • *May 22, 1991*

yanglin@buaa.edu.cn • +8613121936253 • mu4yang *(Skype)*
www.mu4yang.com • P.R. China

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)

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, IF 5.3).
- 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, IF 4.8).

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).

Skills

Technical specialties:
Proficient: MATLAB/C++/LaTeX/OpenCV
Familiar: Python/Caffe/Linux/CVX/VLFeat/SPAMS

Languages:
Mandarin Chinese *(mother tongue)*, English *(TOEFL 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. — Beijing, China
Software Engineer — *2013.12 – 2014.6*
Participated in the development of airplane detection systerm

Beijing Lamp Goldeneye Technology Co.,Ltd. — Beijing, China
Algorithm Engineer — *2016.9 – 2017.3*
Researched on convolutional sparse coding

Research Experience

Manifold Constraint 2016.7 - 2017.3

- Proposed manifold constraints to reduce noise and perturbation of the intput.
- 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.
