LIMIN WANG

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Room 703, Ho Sin-Hang Engineering Building

The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

EDUCATION

The Chinese University of Hong Kong, Hong Kong   *August 2011 - present*
Ph.D. in Information Engineering, Advisor: Prof. Xiaoou Tang.

Nanjing University, Nanjing, China   *September 2007 - June 2011*
B.Sc. in Computer Science and Technology, Advisor: Prof. Tong Lu.
GPA: 4.53/5, Rank: 4/160.
Best Bachelor Thesis Team of Jiangsu Province (first author).

RESEARCH INTERESTS

Computer Vision: action recognition and detection, object recognition and detection.
Machine Learning: representation learning, deep learning.

RESEARCH EXPERIENCES

Multimedia Lab, The Chinese University of Hong Kong   *August 2011 - present*
· We propose a sequential skeleton model to capture the dynamics of key poses for action detection.
· We propose a hierarchical model to describe the temporal structures of complex actions such as sports.
· We design mid-level video representations to describe the visual content for action recognition.
· We present new feature encoding methods and supervised dictionary learning of VLAD.
· We comprehensively study encoding methods and fusion strategies for action recognition in videos.

State Key Lab for Novel Software Tech., Nanjing University   *June 2009 - June 2011*
· We design a novel method for multiclass object detection by combing local appearances and context.
· We propose a novel framework to convert a surveillance video clip into one abstract image containing the integrated contour of interested object.

PUBLICATIONS

Technical Reports
· X. Peng, **L. Wang**, X. Wang and Y. Qiao, Bag of Visual Words and Fusion Methods for Action Recognition: Comprehensive Study and Good Practice, arXiv:1405.4506.

Journal Papers
· **L. Wang**, Y. Qiao, and X. Tang, MoFAP: A Multi-Level Representation for Action Recognition, submitted to International Journal of Computer Vision (IJCV) (after major revision).
· **L. Wang**, Y. Qiao, and X. Tang, Latent Hierarchical Model of Temporal Structure for Complex Activity Classification, in IEEE Transactions on Image Processing (TIP), Vol. 23, No. 2, 2014.

CVPR, ICCV, ECCV Papers
· **L. Wang**, Y. Qiao, and X. Tang, Action Recognition with Trajectory-Pooled Deep-Convolutional Descriptors, in IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Boston, Massachusetts USA, 2015.

- **L. Wang**, Y. Qiao, and X. Tang, Video Action Detection with Relational Dynamic-Poselets , in European Conference on Computer Vision (ECCV), Zurich, Switzerland, 2014. (poster, 23.9 % acceptance rate)

- X. Peng*, **L. Wang***, Y. Qiao, and Q. Peng, Boosting VLAD with Supervised Dictionary Learning and High-Order Statistics, in European Conference on Computer Vision (ECCV), Zurich, Switzerland, 2014. (poster, 23.9 % acceptance rate, first two authors contribute equally)

- Z. Cai, **L. Wang**, X. Peng, and Y. Qiao, Multi-view Super Vector for Action Recognition, in IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Columbus, Ohio, USA, 2014. (oral, 5.7 % acceptance rate)

- **L. Wang**, Y. Qiao, and X. Tang, Mining Motion Atoms and Phrases for Complex Action Recognition, in IEEE International Conference on Computer Vision (ICCV), Sydney, Australia, 2013. (poster, 25.4% acceptance rate)

- **L. Wang**, Y. Qiao, and X. Tang, Motionlets: Mid-Level 3D Parts for Human Motion Recognition, in IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Portland, Oregon, USA, 2013. (poster, 25.2% acceptance rate)

Other Papers

- X. Peng, **L. Wang**, Y. Qiao, and Q. Peng, A Joint Evaluation of Dictionary Learning and Feature Encoding for Action Recognition, in International Conference on Pattern Recognition (ICPR), Stockholm, Sweden, 2014. (poster, 40% acceptance rate)

- X. Wang, **L. Wang**, and Y. Qiao, A Comparative Study of Encoding, Pooling and Normalization Methods for Action Recognition, in Asian Conference on Computer Vision (ACCV), Daejeon, Korea, 2012. (poster, 23.2% acceptance rate)

- **L. Wang**, Y. Wu, T. Lu, and K. Chen, Multiclass Object Detection by Combining Local Appearances and Context, in ACM Conference on Multimedia (ACM MM), Scottsdale, Arizona, USA, 2011. (poster, 30% acceptance rate)

- **L. Wang**, Y. Wu, Z. Tian, Z. Sun, and T. Lu, A Novel Approach for Robust Surveillance Video Content Abstraction, in Pacific-Rim Conference on Multimedia (PCM), Shanghai, China, 2010.

CONTESTS

THUMOS'14 Action Recognition Challenge (Rank 4/14, Rank 2/3)	*2014*
Chalearn Looking at People Challenge (Rank 1/2, Rank 1/6, Rank 4/17)	*2014*
THUMOS'13 Action Recognition Challenge (Rank 4/16)	*2013*
Chalearn Multi-Modal Gesture Recognition Challenge (Rank 4/54)	*2013*

ACADEMIC SERVICE

Reviewer of IEEE Transactions on Circuits and Systems for Video Technology

HONORS AND AWARDS

Hong Kong PhD Fellowship (114 candidates in Hong Kong)	*2011 - present*
Best Bachelor Thesis Team of Jiangsu Province (1 recipient in Nanjing University)	*2011*
Outstanding Graduate of Nanjing University	*2011*
Excellent Undergraduate Innovation Project of Nanjing University	*2010*
Google Scholarship (1 recipient in CS department)	*2010*
National Scholarship (3 recipients in CS department)	*2009*
Province First Prize, China Undergraduate Mathematical Contest in Modeling	*2009*
Tung OOCL (Orient Overseas Container Line) Scholarship (3 recipients in CS department)	*2008*
Outstanding Student of Nanjing University	*2008*