Yangqing Jia

CONTACT INFORMATION

1947 Center St Suite 600 Rm 525 (408)701-7701
Berkeley, CA 94704 jiayq@eecs.berkeley.edu
http://www.eecs.berkeley.edu/~jiayq/

EDUCATION

University of California at Berkeley, Berkeley, CA Aug 2009 – present
Ph.D. candidate in Computer Science, advised by Prof. Trevor Darrell.
Cumulative GPA: 4.0/4.0.

Tsinghua University, Beijing, China Sep 2002 – Jul 2009
M.S. in Control Science and Engineering, 2009.
Cumulative GPA: 91.0/100, Rank: 4/160.

B.S. in Automation, 2006. *summa cum laude*.
Undergraduate Fellowship for 4 years.
Cumulative GPA: 92.5/100, Rank: 1/181

EXPERIENCE

Google Research May 2012 – Aug 2012
Research Intern with Dr. Mei Han
- Developed novel saliency detection algorithms based on high-level object information and intra-image superpixel-level agreement. Patent Pending.

Media Analytics Group, NEC Lab America May 2011 – Aug 2011
Research Intern with Dr. Chang Huang and Dr. Kai Yu
- Investigated metric learning and classification with convolutional image features
- Developed distributed receptive field learning algorithms for image classification. Patent Pending.

UC Berkeley Sep 2009 – Present
Graduate Student Researcher with Prof. Trevor Darrell
- Worked on learning better structures for image classification, and visually grounded cogscience models. See publication list for details.
- Teaching Assistant of CS281A (Statistical Learning Theory) and CS188 (Introduction to Artificial Intelligence). Won Campus Best GSI award.

Dept. of ECE, National University of Singapore Sep 2008 – Dec 2008
Research Engineer with Prof. Shuicheng Yan
- Investigated semi-supervised learning on temporally evolving online text data.

Internet Media Group, Microsoft Research Asia Oct 2007 – Apr 2008
Visiting Researcher with Dr. Jingdong Wang and Dr. Xian-Sheng Hua
- Developed fast unsupervised and interactive image segmentation.
- Developed a new image search result clustering algorithm based on affinity propagation.

Dept. of Automation, Tsinghua University Sep 2006 – Jul 2009
Research Assistant with Prof. Changshui Zhang
- Worked on multi-instance learning and its application to vision and text processing. - Explored several open problems in dimensionality reduction, semi-supervised learning, and distance metric learning.

PUBLICATION

CONFERENCES

1. Jia, Y., Darrell, T. **Latent Task Adaptation with Large-scale Hierarchies**. ICCV, 2013.

2. Jia, Y., Han, M. **Category-Independent Object-level Saliency Detection**. ICCV, 2013.
3. Jia, Y., Vinyals, O., Darrell, T. **On Compact Codes for Spatially Pooled Features**. ICML, 2013.
4. Vinyals, O., Jia, Y., Darrell, T. **Why Size Matters: Feature Coding as Nyström Sampling**. ICLR, 2013.
5. Vinyals, O., Jia, Y., Deng, L., Darrell, T. **Learning with Recursive Perceptual Representations**. NIPS, 2012.
6. Virtanen, S., Jia, Y., Klami, A., Darrell, T. **Factorized Multi-modal Topic Model**. UAI, 2012.
7. Jia, Y., Huang, C., Darrell, T. **Beyond Spatial Pyramids: Receptive Field Learning for Pooled Image Features**. CVPR, 2012.
8. Jia, Y., Darrell, T., **Heavy-tailed Distances for Gradient Based Image Descriptors**. NIPS, 2011.
9. Jia, Y., Salzmann, M., Darrell, T. **Learning Cross-modality Similarity for Multinomial Data**. ICCV, 2011.
10. Karayev, S., Janoch, A., Jia, Y., Barron, J.T., Fritz, M., Saenko, K., Darrell, T. **A Category-level 3-D Database: Putting the Kinect to Work**. ICCV Workshop on Consumer Depth Cameras for Computer Vision, 2011.
11. Saenko, K., Karayev, S., Jia, Y., Fritz, M., Long, J., Janoch, A., Shyr, A., Darrell, T. **Practical 3-D Object Detection Using Category and Instance-level Appearance Models**. IROS, 2011.
12. Jia, Y., Salzmann, M., Darrell, T., **Factorized Latent Spaces with Structured Sparsity**. NIPS, 2010.
13. Jia, Y., Yan, S., Zhang, C., **Semi-supervised Learning on Evolutionary Data**. IJCAI 2009.
14. Jia, Y., Wang, Z., Zhang, C., **Distortion-Free Nonlinear Dimensionality Reduction**. The European Conference on Machine Learning (ECML), 2008.
15. Jia, Y., Zhang, C., **Instance-level Semi-supervised Multiple Instance Learning**. The 23rd AAAI Conference on Artificial Intelligence (AAAI), 2008.
16. Jia, Y., Wang, J., Zhang, C., Hua, X-S., **Finding Image Exemplars Using Fast Sparse Affinity Propagation**. ACM International Conference on Multimedia (ACM MM), 2008.
17. Wang, J., Jia, Y., Hua, X-S., Zhang, C., Quan, L., **Normalized Tree Partitioning for Image Segmentation**. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008.
18. Nie, F., Xiang S., Jia, Y., Zhang, C., Yan, S., **Trace Ratio Criterion for Feature Selection**. The 23rd AAAI Conference on Artificial Intelligence (AAAI), 2008.
19. Jia, Y., Zhang, C., **Learning Distance Metric for Semi-supervised Image Segmentation**. IEEE International Conference on Image Processing (ICIP), 2008.
20. Jia, Y., Wang, J., Zhang, C., Hua, X-S., **Augmented Tree Partitioning for Interactive Image Segmentation**. IEEE International Conference on Image Processing (ICIP), 2008.

Journals

1. Nie, F., Xiang, S., Jia, Y., Zhang, C., **Semi-supervised orthogonal discriminant analysis via label propagation**. Pattern Recognition, 42:11, 2009.
2. Jia, Y., Nie, F., Zhang, C., **Trace Ratio Problem Revisited**. IEEE Transactions on Neural Networks, 20:4, 2009.
3. Jia, Y., Zhang, C.. **Front-view Vehicle Detection by Markov Chain Monte Carlo Method**. Pattern Recognition, 42:3, 2009.

Awards

Campus Best Graduate Student Instructor Award, UC Berkeley	2012
Department Fellowship support, UC Berkeley	2009

First-class Graduate Scholarship out of 2500 students, Tsinghua University	2008
Scholarship for academic excellence, Tsinghua University	2007
Title of Outstanding Graduates out of 3000 students	2006
Undergraduate Fellowship for 4 years, Tsinghua University	2003 – 2006
HP Scholarship, China National Scholarship Council	2005

SKILLS

Proficient in Python, C/C++, Parallel Programming with OpenMP and MPI.
Experience with MapReduce and GPU (CUDA).