Ashwin Thangali

Curriculum Vitae
June 12, 2013

Contact info

Boston University
Department of Computer Science
Boston, MA 02215
e-mail: tvashwin@cs.bu.edu
web: http://cs-people.bu.edu/tvashwin

Areas of research expertise

Machine learning: Bayesian learning in probabilistic models, Kernel methods for object detection

Computer vision: Human behaviour analysis and tracking methods, non-rigid image alignment

Multimedia retrieval: Image and video retrieval

Education

Boston University, Computer Science Dept., Ph.D., 2013

Indian Institute of Science, Bangalore, Electrical Engineering, M.E., 2000

National Institute of Technology Karnataka, Surathkal, B.E., 1998

Professional appointments

2013 – present: Postdoctoral associate

2003 – 2013: Research assistant and Teaching fellow, CS Dept., Boston University

2012: Summer research intern, Image Analytics Lab, GE Global Research Center, NY

2000 – 2003: Research Staff Member, IBM Research, New Delhi, India

Academic awards

Hariri Award for Innovative Computing Models, Algorithms, and Systems Research, April 2013

Best paper award, "The American Sign Language Lexicon Video Dataset", IEEE Workshop on Computer Vision and Pattern Recognition for Human Communicative Behavior Analysis, 2008

Best teaching fellow award, Computer Science, 2004

Professional activities

Served as reviewer for CIVR, CVPR, ECCV, ICCV, IJCV, CVIU and Transactions on Image Processing

Served as co-organizer of IVC weekly research colloquiums during 2009 – 2010

Publications in refereed journals

1. Quan Yuan, Ashwin Thangali, Vitaly Ablavsky and Stan Sclaroff, " Learning a family of detectors via multiplicative kernels", *Topics in Medical Image Processing and Computational Vision*, Springer Science, 2012.

2. Quan Yuan, Ashwin Thangali, Vitaly Ablavsky and Stan Sclaroff, "Learning a Family of Detectors via Multiplicative Kernels", *IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)*, Vol. 33(3), 2011.

3. Gaurav Aggarwal, Ashwin Thangali and Sugata Ghosal, "An image retrieval system with automatic query modification", *IEEE Transactions on Multimedia*, 4(2): 201-214, 2002.

4. Ashwin Thangali and P.S. Sastry, "Font and Size Independent OCR System for Printed Kannada Documents using Support Vector Machines", *Sadhana*, Vol.27, pp.35-58, 2002.

Publications in refereed conference proceedings

1. Zheng Wu, Ashwin Thangali, Stan Sclaroff, Margrit Betke, "Coupling Detection and Data Association for Multiple Object Tracking", *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2012.

2. Carol Neidle, Ashwin Thangali, Stan Sclaroff, "Challenges in development of the American Sign Language Lexicon Video Dataset (ASLLVD) corpus", *5th Workshop on the Representation and Processing of Sign Languages: Interactions between Corpus and Lexicon*, LREC 2012.

3. Ashwin Thangali, Joan Nash, Stan Sclaroff and Carol Neidle, "Exploiting Phonological Constraints for Handshape Inference in ASL Video", *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2011.

4. Vassilis Athitsos, Carol Neidle, Stan Sclaroff, Joan Nash, Alexandra Stefan, Ashwin Thangali, Haijing Wang and Quan Yuan, "Large Lexicon Project: American Sign Language Video Corpus and Sign Language Indexing/Retrieval Algorithms", *Workshop on the Representation and Processing of Sign Languages: Construction and Exploitation of Sign Language Corpora*, 2010.

5. Ashwin Thangali and Stan Sclaroff, "An alignment based similarity measure for hand detection in cluttered sign language video", *IEEE Workshop on Computer Vision and Pattern Recognition for Human Communicative Behavior Analysis (CVPR4HB)*, 2009.

6. Vitaly Ablavsky, Ashwin Thangali and Stan Sclaroff, "Layered graphical models for tracking partially-occluded objects", *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2008.

7. Quan Yuan, Ashwin Thangali, Vitaly Ablavsky and Stan Sclaroff, "Multiplicative Kernels: Object Detection, Segmentation and Pose Estimation", *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2008.

8. Vassilis Athitsos, Carol Neidle, Stan Sclaroff, Joan Nash, Alexandra Stefan, Quan Yuan and Ashwin Thangali, "The American Sign Language Lexicon Video Dataset", *IEEE Workshop on Computer Vision and Pattern Recognition for Human Communicative Behavior Analysis (CVPR4HB)*, 2008.

9. Quan Yuan, Ashwin Thangali, Vitaly Ablavsky and Stan Sclaroff, "Parameter Sensitive Detectors", *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2007.

10. Daniel Gutchess, Vitaly Ablavsky, Ashwin Thangali, Stan Sclaroff and Magnus Snorrason, "Video Surveillance of Pedestrians and Vehicles", *SPIE Conference. on Tracking, Pointing and Laser Systems Technologies XXI*, Vol. 6569, 2007.

11. Quan Yuan, Ashwin Thangali and Stan Sclaroff, "Face Identification by a Cascade of Rejection Classifiers", *IEEE Workshop on Face Recognition Grand Challenge Experiments*, 2005.

12. Ashwin Thangali and Stan Sclaroff, "Periodic Motion Detection and Estimation via Space-Time Sampling", *IEEE Workshop on Motion and Video Computing*, 2005.

13. Ashwin Thangali, Rahul Gupta and Sugata Ghosal, "Leveraging Non-Relevant Images To Enhance Image Retrieval Performance", *ACM Conference on Multimedia*, 2002.

14. Ashwin Thangali, Rahul Gupta and Sugata Ghosal, "Adaptable Similarity Search using Non-Relevant Information", *28th International Conference on Very Large Data Bases (VLDB)*, 2002.

15. Adams et.al., "IBM Research TREC-2002 Video Retrieval System", *Text Retrieval Conference (TREC) 2002, Video Retrieval Track.*

16. Ashwin Thangali, Sugata Ghosal and Navendu Jain, "Improving image retrieval performance with Negative relevance Feedback", *International Conference on Acoustics Speech and Signal Processing (ICASSP)*, 2001.

Research interns supervised at Boston University:

Tianxiong Jiang, 2011 – 2013, B.A., Computer Science, Boston University.

Eric Cornelius, 2008 – 2009, B.A., Computer Science, Boston University.

Programming experience:

Proficient in C, C++, ITK, Matlab, Java, JavaScript, OpenCV and OpenGL.

Personal info

Citizenship: India.

Visa status: OPT work authorization until 05/20/2013.