Exhibit A

CURRICULUM VITAE OF TREVOR J. DARRELL

February 24, 2012

I. Education:

School	Degree	Date
University of Pennsylvania.	B.S.E	1988
MIT	MS	1991
MIT	Ph.D.	1996

II. Experience:

Employer	Position	Beginning	Ending
Univ. of Pennsylvania	Sys. Prog./Administrator	1985	1988
Cold Spring Harbor Lab	Teaching Assistant	1994	1994
Stanford University	Visiting Researcher	1994	1994
Stanford University	Visiting Instructor	1997	1997
Interval Research Corp.	Research Staff	1996	1999
MIT	Assistant Professor	1999	2003
MIT	Associate Professor	2003	2008
ICSI	Group Head & Sr. Res. Sci.	2008	present
UC Berkeley	Assoc. Adj. Professor	2008	present

III. Professional Service:

Activity	Beginning	Ending
Conference on Computer Vision and Pattern Recognition (CVPR)		
Program Committee	1999, 2000, 2004, 2005	
Area Chair	2001, 2008	
Program Chair	2010	
Conference on Face and Gesture Recognition		
Program Committee	2000	2000
International Conference on Computer Vision (ICCV)		
Program Committee	2000	2000
Area Chair	2005	2005
International Conference on Multimodal Interfaces (ICMI)		
Program Committee	2000, 2002	
Advisory board member, 2003-present	2003	present
Program Chair	2003	2003
General Chair	2004	2004
Area Chair	2005, 2006	
Conference on Perceptual User Interfaces (PUI)		
Program Chair	2001	2001
Conference on Ubiquitous Computing (UBICOMP)		

Program Committee	2002	2002
NSF Panels (SBIR, HCI, ITR, CAREER, AI)	2002	2008
DARPA Information Science and Technology Advisory Study Group (ISAT): Member	2003	2007
Future Command Study	2003	2004
Embedded Humans Study	2004	2005
Trusted Deployable Adaptive Systems Study	2005	2006
Data Taming Study	2005	2006
Co-Chair, Adaptive and Interactive Representations Quick Reaction Study	2006	2006
Chair, Exploitation of Persistent Operational Surveillance (EXPOSE) Study	2007	2007
Neural Information Processing Systems (NIPS) Conference: Senior Program Committee	2004	2004
Editor, *CACM Special Issue on Perceptive Multimodal Interfaces*	2004	2004
AAAI conference; Program Committee, 2004	2004	2004
Associate Editor, *Artificial Intelligence Journal*	2004	present
Associate Editor, *IEEE Trans. Pattern Analysis and Machine Intelligence*	2005	present
DARPA Computer Sciences Futures Study (Junior Faculty), Member	2006	2006

IV. Publications

Books:

1. Shakhnarovich, G., T. Darrell, and P. Indyk, eds., *Nearest-Neighbor Methods in Learning and Vision*, MIT Press, 2006

Papers in Refereed Journals:

1. Darrell, T. and K. Wohn, "Depth from Focus using a Pyramid Architecture," *Pattern Recognition Letters, 11(12)*, pp. 787-796, 1990.

2. Pentland, A., S. Sherock, T. Darrell, and B. Girod, "Simple Range Cameras Based on Focal Error," *J. Optical Soc. of Am. A, 11(11)*, pp. 2925-2934, 1994.

3. Darrell, T. and A. Pentland, "Cooperative Robust Estimation using Layers of Support," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *17(5)*, pp. 474-487, 1995.

4. Johnson, M., T. Darrell, and P. Maes, "Evolving Visual Routines," *Artificial Life Journal, 1(4)*, pp. 373-389, 1995.

5. Darrell, T., I. Essa, and A. Pentland, "Task Specific Gesture Analysis using Interpolated Views," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, pp. 1236-1242, December 1996.

6. Maes, P., T. Darrell, B. Blumberg, and A. Pentland, "The ALIVE System: Wireless, Full-Body Interaction with Autonomous Agents," *Multimedia Systems*, pp. 105-112, March 1997.

7. Wren, C., A. Azarbayejani, T. Darrell, and P. Pentland, "Pfinder: Real-Time Tracking of the Human Body," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, pp. 780-785, July 1997.

8. Darrell, T., G. Gordon, M. Harville, and J. Woodfill, "Integrated person tracking using stereo, color, and pattern detection," *International Journal of Computer Vision, 37(2):* 175-185, June 2000.

9. Ackerman, M., T. Darrell, and D. Weitzner, "Privacy in Context," *Human-Computer Interaction*, 16:167-176, 2001.

10. Darrell, T. and M. Covell, "Correspondence with Cumulative Similiarity Transforms," *IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 23*, No. 2, pp. 222-227, February 2001.

11. Taycher, L. and T. Darrell, "Range Segmentation Using Visibility Constraints," *International Journal of Computer Vision*, pp. 89-98, 2002.

12. Demirdjian, D. and T. Darrell, "Using Multiple-Hypothesis Disparity Maps and Image Velocity for 3-D Motion Estimation," *International Journal of Computer Vision*, Kluwer, pp. 219-222, 2002.

13. F. Bentley, K. Tollmar, D. Demirdjian, K. Koile and T. Darrell. "Perceptive Presence," *IEEE Computer Graphics and Applications*, pp. 26-36, September 2003.

14. Fisher, J. and T. Darrell, "Speaker segregation with signal-level audiovisual correspondence," *IEEE Transactions on Multimedia*, pp. 406-413, June 2004.

15. Demirdjian, D., T. Ko, and T. Darrell, "Untethered Gesture Acquisition and Recognition for Virtual World Manipulation,", *Virtual Reality*, Springer, pp. 222-230, 2005.

16. Christoudias, C. M., L. Morency, and T. Darrell, "Non-Parametric Light-Field Deformable Models", *Computer Vision and Image Understanding*, Elsevier, pp. 16-35, October 2006.

17. Wilson, K., and T. Darrell, "Learning a Precedence Effect-like Weighting Function for the Generalized Cross-Correlation Framework", *IEEE Transactions on Audio, Speech, and Language Processing*, pp. 2156-2164, November 2006.

18. Grauman, K., and T. Darrell, "The Pyramid Match Kernel: Discriminative Classification with Sets of Image Features", *Journal of Machine Learning Research (JMLR),* pp 725-760, April 2007.

19. Taycher, L., J. Fisher, and T. Darrell, "Combining Object and Feature Dynamics in Probabilistic Tracking", *Computer Vision and Image Understanding*, Elsevier, accepted for publication, v.108(3): 243-260, 2007.

20. Rahimi, A., B. Recht, and T. Darrell, "Learning to Transform Time Series with a Few Examples" *IEEE Transactions on Pattern Analysis and Machine Intelligence,* vol. 29, no 10, pp. 1759-1775, October 2007.

21. Quattoni, A., S. Wang, L.-P Morency, M. Collins, and T. Darrell, "Hidden-state Conditional Random Fields", *IEEE Transactions on Pattern Analysis and Machine Intelligence,* accepted for publication, vol. 29, no. 10, pp. 1848-1852, October 2007.

22. Morency, L.-P., C. Sidner, C. Lee, and T. Darrell, "Head Gestures for Perceptual Interfaces: The Role of Context in Improving Recognition", *Artificial Intelligence Journal,* vol. 171, issue 8-9, pp 568-585, June 2007.

23. Rahimi, A., L.-P. Morency, and T. Darrell, Reducing Drift in Differential Tracking, *Computer Vision and Image Understanding (CVIU)*, pp. 97-111, February 2008.

24. Saenko, K., K. Livescu, J. Glass, and T. Darrell, " Multistream Articulatory Feature-Based Models for Visual Speech Recognition", IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), Vol. 31, No. 9, pp. 1700-1707, September 2009.

25. Kapoor, A., K. Grauman, R. Urtasun, and T. Darrell, "Gaussian Processes for Object Categorization", *IJCV,* vol. 88, no. 2, pp. 169-188, June 2010.

26. Stone, Z., T. Zickler, and T. Darrell, "Toward Large-Scale Face Recognition Using Social Network Context", Proceedings of the IEEE, 9 pp., August 2010.

Proceedings of Highly Selective Refereed Conferences:

1. Batchelder, N., and T. Darrell, "Psfig - A Ditroff preprocessor for PostScript figures," *USENIX Conference Proceedings*, Phoenix, AZ, pp. 31-42, June 1987.

2. Darrell, T. and K. Wohn, "Pyramid-based Depth from Focus," in *Proceedings,   Conference on Computer Vision and Pattern Recognition (CVPR '88)*, Ann Arbor, MI, pp. 504-509, June 1988.

3. Pentland, A., T. Darrell, M. Bove, and M. Turk, "A Simple Real-Time Range Camera," in *Proceedings,   Conference on Computer Vision and Pattern Recognition (CVPR '89)*, San Diego, CA, pp. 256-261, June 1989.

4. Darrell, T. and A. Pentland, "Segmentation by Minimal Description," in *Proceedings, Third International Conference on Computer Vision (ICCV '90)*, Tokyo, Japan, pp. 112-116, December 1990.

5. Darrell, T. and A. Pentland, "On the Representation of Occluded Shapes," in *Proceedings, Conference on Computer Vision and Pattern Recognition (CVPR '91)*, Maui, HI, pp. 728-729, June 1991.

6. Darrell, T. and A. Pentland, "Against Edges: Function Approximation with Multiple Support Maps," in *Advances in Neural Information Processing Systems (NIPS '92)*, Denver, CO, pp. 388-395, December 1992.

7. Darrell, T. and A. Pentland, "Space-Time Gestures," in *Proceedings, Conference on Computer Vision and Pattern Recognition (CVPR '93)*, New York, NY, pp. 335-340, June 1993.

8. Darrell, T. and E. Simoncelli, "Nulling Filters and the Separation of Transparent Motions," in *Proceedings, Conference on Computer Vision and Pattern Recognition (CVPR '93)*, New York, NY, pp. 738.739, June 1993.

9. Johnson, M., P. Maes, and T. Darrell, "Evolving Visual Routines," in *Proceedings, Conference on Artificial Life (ALIFE '94)*, Boston, MA, pp. 373-389, July 1994.

10. Darrell, T., and A. Pentland, "Classifying Hand Gestures with a View-Based Distributed Representation," *Advances in Neural Information Processing Systems (NIPS '94)*, Denver, CO, pp. 945-952, December 1994.

11. Maes, P., B. Blumberg, T. Darrell, A. Pentland, and A. Wexelblat, "Modeling Interactive Agents in ALIVE," *Proceedings of the Fourteenth International Joint Conference on Artificial Intelligence (IJCAI '95)*, Montreal, Canada, pp. 11-18, August 1995.

12. Darrell, T., I. Essa, and A. Pentland, "Correlation and Interpolation Networks for Real time Expression Analysis/Synthesis," in *Advances in Neural Information Processing Systems 7 (NIPS '95)*, Denver, CO, pp. 909-916, December 1995.

13. Darrell, T. and A. Pentland, "Active Gesture Recognition using Learned Visual Attention," in D. S. Touretzky, M. Mozer, and M. Hasselmo, eds., *Advances in Neural Information Processing Systems (NIPS '96)* 8, Denver, CO, pp. 67-72, December 1996.

14. Darrell, T., "A radial cumulative similarity transform for robust image correspondence," *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR '98)*, Santa Barbara, CA, pp. 656-663, June 1998.

15. Darrell, T., G. Gordon, M. Harville, and J. Woodfill , "Integrated person tracking using stereo, color, and pattern detection," *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR '98)*, Santa Barbara, CA, pp. 601-609, June 1998.

16. Darrell, T., "Example Based Image Synthesis of Articulated Figures," *Advances in Neural Information Processing Systems 11, (NIPS '98)*, Denver, CO, 768-774, 1999.

17. Gordon, G., T. Darrell, M. Harville, and J. Woodfill, "Background Estimation and Removal Based on Range and Color," *Proceedings of the Conference on Computer Vision and Pattern Recognition (CVPR '99)*, Ft. Collins, CO, pp. 459-464, June 1999.

18. Covell, M. and T. Darrell, "Dynamic Occluding Contours: A new external energy term for snakes," *Proceedings of the Conference on Computer Vision and Pattern Recognition (CVPR '98)*, Ft. Collins, CO, pp. 222-227, June 1999.

19. Harville, M, A. Rahimi, T. Darrell, G. Gordon, and J. Woodfill, "3D Pose Tracking with Linear Depth and Brightness Constraints," *Proceedings of the International Conference on Computer Vision (ICCV '99)*, Corfu, Greece, pp. 206-213, September 1999.

20. Covell, M., A. Rahimi, M. Harville, and T. Darrell, "Articulated-Pose Estimation using Brightness and Depth-Constancy Constraints," *Proceedings of the Conference on Computer Vision and Pattern Recognition (CVPR '00)*, Hilton Head, SC, pp. 2438-2445, June 2000.

21. Darrell, T., J. Fisher, P. Viola, and B. Freeman, "Audio-visual Segmentation and the Cocktail Party Effect," *Proceedings of the International Conference on Multimodal Interfaces (ICMI '00)*, Beijing, China, pp. 32-40, October 2000.

22. Fisher, J., J. Trevor, B. Freeman, and P. Viola, "Learning Joint Statistical Models for Audio-Visual Fusion and Segregation," *Advances in Neural Information Processing Systems 13 (NIPS '00)*, Denver, CO, pp. 772-778, December 2000

23. Shakhnarovich, G., L. Lee, and T. Darrell, "Integrated Face and Gait Recognition from Multiple Views," *Proceedings IEEE Conference on Computer Vision and Pattern Recognition (CVPR '01)*, Kauai, HI, pp. 439-446, December 2001.

24. Rahimi, A., L.-P. Morency, and T. Darrell, "Reducing Drift in Parametric Motion Tracking," *Proceedings of the International Conference on Computer Vision (ICCV '01)*, Vancouver, Canada, pp. 315-322, July 2001.

25. Demirdjian, D. and T. Darrell, "Motion Estimation from Disparity Images," *Proceedings of the International Conference on Computer Vision (ICCV '01)*, Vancouver, Canada, pp. 13-16, July 2001.

26. Darrell, T., D. Demirdjian, N. Checka, and P. Felzenswalb, "Plan-view Trajectory Estimation with Dense Stereo Background Models," *Proceedings of the International Conference on Computer Vision (ICCV '01)*, Vancouver, Canada, pp. 628-635, July 2001.

27. Shakhnarovich, G., J. Fisher, and T. Darrell, "Face recognition from long-term observations," *Proceedings of European Conference on Computer Vision (ECCV '02)*, Copenhagen, Denmark, pp. 850-868, May 2002.

28. Fisher, J., and T. Darrell, "Probabilistic models and informative subspaces for audiovisual correspondence," *Proceedings of European Conference on Computer Vision (ECCV '02)*, Copenhagen, Denmark, pp. 592-603, May 2002.

29. Darrell, T., K. Tollmar, F. Bentley, N. Checka, L.-P. Morenecy, A. Rahimi, and A. Oh, "Face-responsive interfaces: from direct manipulation to perceptive presence," *Proceedings Ubiquitous Computing Conference, (UBICOMP '02)*, Goteburg, Sweden, pp. 135-151, September 2002.

30. Demirdjian, D. and T. Darrell, "3-D articulated pose tracking for untethered deictic reference," *Proceedings International Conf. on Multimodal Interfaces*, Pittsburgh, PA, pp. 267-272, October 2002.

31. Wilson, K., V. Rangarajan, N. Checka, and T. Darrell, "Audiovisual arrays for untethered spoken interface," *Proceedings International Conference on Multimodal Interfaces,* Pittsburgh, PA, p. 389-394, October 2002.

32. Rahimi, A. and T. Darrell, "Location Estimation with a Differential Update Network," *Advances in Neural Information Processing, (NIPS '02)*, Vancouver, Canada, pp. 1049-1056, December 2002.

33. Taycher, L., J. W. Fisher III, and T. Darrell, "Recovering Articulated Model Topology from Observed Motion," *Advances in Neural Information Processing Systems, (NIPS '02)*, Vancouver, Canada, pp. 1311-1318, December 2002.

34. Morency, L., A. Rahimi, and T. Darrell, "Adaptive View-based Appearance Model," *Proceedings IEEE Conference on Computer Vision and Pattern Recognition (CVPR '03)*, Madison, WI, pp. 803-810, June 2003.

35. Demirdjian. D., T. Ko, and T. Darrell, "Constraining Human Body Tracking," *Proceedings International Conference on Computer Vision, (ICCV '03)*, Nice, France, pp. 1071-1078, October 2003.

36. Grauman, K., G. Shakhnarovich, and T. Darrell, "Inferring 3D Structure with a Statistical Shape Model," *Proceedings International Conference on Computer Vision (ICCV '03)*, Nice, France, pp. 641-648, October 2003.

37. Shakhnarovich. G., P. Viola, and T. Darrell, "Fast Pose Estimation with Parameter-sensitive Hashing," *Proceedings International Conference on Computer Vision (ICCV '03)*, Nice, France, pp. 750-757, October 2003.

38. Koile, K., K. Tollmar, D. Demirdjian, and T. Darrell, "Activity Zones for Context-Aware Computing," *Proceedings, Ubiquitous Computing Conference (UBICOMP '03)*, Seattle, WA, pp. 90-106, October 2003.

39. Siracusa, M., K. Wilson, L. Morency, J. Fisher, and T. Darrell, "A Multi-Modal Approach for Determining Speaker Location and Intent," *Proceedings, International Conference Multimodal Interfaces (ICMI '03)*, Vancouver, Canada, pp. 77-80, November 2003.

40. Ko, T., D. Dermidjian, and T. Darrell, "Untethered Gesture Acquisition and Recognition for a Multimodal Conversational System," *Proceedings, International Conference. Multimodal Interfaces (ICMI '03)*, Vancouver, Canada, pp. 147-150, December 2003.

41. Grauman, K., G. Shakhnarovich, and T. Darrell, "A Bayesian Approach to Image-Based Visual Hull Reconstruction," *Proceedings IEEE Conference on Computer Vision and Pattern Recognition, (CVPR '03)*, Madison, WI, pp. 187-194, June 2003.

42. Christoudias, C. M., L. Morency, and T. Darrell, "Light Field Appearance Manifolds," *Proceedings of the European Conference on Computer Vision (ECCV '04)*, Prague, Czech Republic, pp. 481-493, May 2004.

43. Rahimi, A. and T. Darrell, "Tracking People with a Sparse Network of Bearing Sensors," *Proceedings of the European Conference on Computer Vision, (ECCV'04)*, Prague, Czech Republic, pp. 507-518, May 2004.

44. Grauman, K. and T. Darrell, "Fast Contour Matching Using Approximate Earth Mover's Distance," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '04)*, Washington, DC, Vol. 1, pp. 220-227, June 2004.

45. Rahimi, A., B. Dunagan, and T. Darrell, "Simultaneous Calibration and Tracking with a Network of Non-Overlapping Sensors," *Proceedings, Conference on Computer Vision and Pattern Recognition (CVPR '04)*, Washington, DC, pp. 187-194, June 2004.

46. Yeh, T., K. Tollmar, and T. Darrell, "Searching the Web with Mobile Images for Location Recognition," in *Proceedings, Conference on Computer Vision and Pattern Recognition (CVPR '04)*, Washington, DC, pp. 76-81, July 2004.

47. Morency, L.-P., and T. Darrell, "From Conversational Tooltips to Grounded Discourse: Head Pose Tracking in Interactive Dialog Systems," *International Conference on Multimodal Interfaces (ICMI '04)*, State College, PA, pp. 32-37, October 2004.

48. K. Saenko, T. Darrell, and J. Glass, "Articulatory Features for Robust Visual Speech Recognition," *Proceedings, International Conference on Multimodal Interfaces (ICMI)*, State College, PA, pp. 152-158, October 2004.

49. Quattoni, A., M. Collins, and T. Darrell, "Conditional Random Fields for Object Recognition," *Advances in Neural Information Processing (NIPS '04)*, Vancouver, Canada, pp. 1097-1104, December 2004.

50. Yeh, T., K. Grauman, K. Tollmar, and T. Darrell, "A Picture is Worth a Thousand Keywords: Image-Based Object Search on a Mobile Platform," *Proceedings ACM Conference on Human Factors in Computer Systems (CHI '05)*, Portland, OR, pp. 2025-2028, April 2005.

51. Grauman, K. and T. Darrell, "Efficient Image Matching with Distributions of Local Invariant Features," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '05)*, San Diego, CA, vol. 2, pp. 627-634, June 2005.

52. Rahimi, A., B. Recht, and T. Darrell, "Learning Appearance Manifolds from Video," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '05)*, San Diego, CA, vol. 1, pp. 868-875, June 2005.

53. Christoudias, C. M. and T. Darrell, "On Modelling Nonlinear Shape-and-Texture Manifolds," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '05)*, San Diego, CA, vol. 2, pp.1067-1074, June 2005.

54. Taycher, L., J. W. Fisher, and T. Darrell, "Combining Object and Feature Dynamics in Probabilistic Tracking," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '05)*, San Diego, CA, vol. 2, pp.106-113, June 2005.

55. Arandjelovi, O., G. Shakhnarovich, J. Fisher, R. Cipolla, and T. Darrell, "Face recognition with image sets using manifold density divergence," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '05)*, San Diego, CA, vol. 1, pp- 581-588, June 2005.

56. Grauman, K., and T. Darrell, "The Pyramid Match Kernel: Discriminative Classification with Sets of Image Features", *Proceedings of the International Conference on Computer Vision, (ICCV '05)*, Beijing, China, pp. 1458-1465, October 2005.

57. Saenko, K., K. Livescu, M. Siracusa, K. Wilson, J. Glass, and T. Darrell, "Visual Speech Recognition with Loosely Synchronized Feature Streams," *Proceedings of the International Conference on Computer Vision (ICCV '05)*, Beijing, China, pp. 1424-1431, October 2005.

58. Demirdjian, D., L. Taycher, G. Shakhnarovich, K. Grauman, and T. Darrell, "Avoiding the 'Streetlight Effect': Tracking by Exploring Likelihood Modes, *Proceedings of the International Conference on Computer Vision (ICCV '05)*, Beijing, China, pp. 357-364, October 2005.

59. Morency, L.P., C. Sidner, C. Lee, and T. Darrell, "Contextual Recognition of Head Gestures," *International Conference on Multimodal Interfaces (ICMI '05)*, *(Best paper award)*, Trento, Italy, pp. 18-24, October 2005. Also appears in *Proc. AAAI-06, NECTAR track,* July 2006.

60. Morency, L.P., and T. Darrell, "Head Gesture Recognition in Intelligent Interfaces: The Role of Context in Improving Recognition", *Proceedings of the International Conference on Intelligent User Interfaces (IUI '06),* Sydney, Australia, pp. 32--38, January 2006.

61. Taycher, L., G. Shakhnarovich, D. Demirdjian, and T. Darrell, "Conditional Random People: Tracking Humans with CRFs and Grid Filters," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '06)*, New York City, New York, pp. 222-229, June 2006.

62. Wang, S., A. Quattoni, L.P. Morency , D. Demirdjian, and T. Darrell, "Hidden Conditional Random Fields for Gesture Recognition," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '06)*, New York City, New York, June 2006 pp. 1521-1527, June 2006.

63. K. Grauman, and T. Darrell, Unsupervised Learning of Categories from Sets of Partially Matching Image Features," *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '06)*, New York City, New York, pp. 19-25, June 2006.

64. Morency, L., M. Christhoudias, and T. Darrell, Recognizing Gaze Aversion Gestures in Embodied Conversational Discourse, *International Conference on Multimodal Interfaces (ICMI '06) (Best paper award),* Banff, Canada, 287-294, October 2006.

65. Christhoudias, M., K. Saenko, L. Morency, and T. Darrell, Co-Adaptation of Audio-Visual Speech and Gesture Classifiers, *International Conference on Multimodal Interfaces, (ICMI '06),* Banff, Canada, pp. 84-91, October 2006.

66. Grauman, K., and T. Darrell, Approximate Correspondences in High Dimensions, *Advances in Neural Information Processing (NIPS '06)*, Vancouver, Canada, 10 pp., December 2006.

67. Quattoni, A., M. Collins, and T. Darrell, Learning Visual Representations using Images with Captions, *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '07),* Minneapolis, pp. 1-8, June 2007

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69. Morency, L.-P., A. Quattoni, and T. Darrell, Latent Dynamic Discriminative Models for Continuous Gesture Recognition, *Proceedings, IEEE Conference on Computer Vision and Pattern Recognition (CVPR '07),* Minneapolis, pp. 1-8, June 2007

70. Urtasun, R. and T. Darrell, Discriminative Gaussian Process Latent Variable Models for Classification, *Proceedings International Conference in Machine Learning (ICML '07),* Corvalis, Oregon, pp. 927-934, June 2007.

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73. Wang, S., D. Demirdjian, and T. Darrell, "Detecting communication errors from visual cues during the system's conversational turn", *Proceedings International Conference on Multimodal Interfaces (ICMI '07),* 8 pp., Nagoya, Japan, November 2007.

74. Christoudias, M., R. Urtasun and T. Darrell, "Multi-View Learning in the Presence of View Disagreement", 9 pp., *In Proceedings of the Conference on Uncertainty in Artificial Intelligence (UAI)*, 2008.

75. R. Urtasun, D. J. Fleet, A. Geiger, J. Popovic, T. Darrell and N. D. Lawrence, "Topologically-Constrained Latent Variable Models", *In International Conference in Machine Learning (ICML),* pp. 104-118, Helsinki, Finland, July 2008

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77. Quattoni, A., M. Collins, T. Darrell, "Transfer Learning for Image Classification with Sparse Prototype Representations", 8 pp., *Conference on Computer Vision and Pattern Recognition CVPR 2008*, Anchorage, AK, June 2008

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79. Urtasun R., and T. Darrell, "Sparse probabilistic regression for activity-independent human pose inference". 8 pp*., Conference on Computer Vision and Pattern Recognition CVPR 2008*, Anchorage, AK, June 2008

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81. Yeh, T., J. Lee, and T. Darrell, "Photo-based Question Answering", *ACM Multimedia 2008*, Pages 389-398, Vancouver, Canada, October 2008,

82. Saenko, K., and T. Darrell, "Unsupervised Learning of Visual Sense Models for Polysemous Word", *Proc. NIPS 2008*, 8 pp., Vancouver, Canada, December 2008.

83. Yeh, T., and T. Darrell, "Fast Concurrent Object Localization and Recognition", 8pp., To appear in the *Conference on Computer Vision and Pattern Recognition, CVPR 2009.*

84. Christoudias, M., R. Urtasun, A. Kapoor and T. Darrell, "Co-training with Noisy Perceptual Observations", 8 pp., To appear in the *Conference on Computer Vision and Pattern Recognition, CVPR 2009.*

85. Geiger, A., R. Urtasun, and T. Darrell, "Rank Priors for Continuous Non-Linear Dimensionality Reduction", 8 pp., To appear in the *Conference on Computer Vision and Pattern Recognition, CVPR 2009.*

86. Frampton, M., R. Fernandez, P. Ehlen, M. Ehlen, M. Christoudias, T. Darrell and S. Peters (2009) *"Who is ``You"? Combining Linguistic and Gaze Features to Resolve Second-Person References in Dialogue"*, 9 pp., *Proceedings of EACL'09*, Athens, Greece

87. Quattoni, A., X. Carreras, M. Collins, T. Darrell, "An Efficient Projection for $l1,\infty$ Regularization", *Proc. International Conference on Machine Learning 2009,* 8 pp. Montreal, 2009.

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90. Saenko K., and T. Darrell, Filtering Abstract Senses From Image Search Results, NIPS 2009, 9 pp

91. Salzmann, M., C. H. Ek, R. Urtasun, and T. Darrell. Factorized orthogonal latent spaces. In Proceedings of the Thirteenth International Conference on Artificial Intelligence and Statistics, May 2010. (8 pp.)

92. Christoudias, M., R. Urtasun, M. Salzmann, and T. Darrell, Learning to Recognize Objects from Unseen Modalities, ECCV 2010. (14 pp.)

93. Saenko, K., B. Kulis, M. Fritz, and T. Darrell, Adapting Visual Category Models to New Domains, ECCV 2010. (14 pp.)

94. Fritz, M., K. Saenko, and T. Darrell, Size Matters: Metric Visual Search Constraints from Monocular Metadata, NIPS 2010. 9pp

95. Jia, Y., M. Salzmann, and T. Darrell, Factorized Latent Spaces with Structured Sparsity, NIPS 2010 9pp

96. Miller, S., M. Fritz, T. Darrell, P. Abbeel, Parametrized Shape Models for Clothing, ICRA 2011, 8pp

97. Shyr, A., T. Darrell, M. Jordan, and R. Urtasun, Supervised Hierarchical Pitman-Yor Process for Natural Scene Segmentation, CVPR 2011, 8pp

98. Kulis, B., K. Saenko, and T. Darrell, What You Saw is Not What You Get: Domain Adaptation Using Asymmetric Kernel Transforms, CVPR 2011, 8pp

99. Owens, K. Saenko, A. Chakrabarti, Y. Xiong, T. Zickler, and T. Darrell. Learning Object Color Models from Multi-view Constraints, CVPR 2011, 8pp

100. Karayev, S., Y. Jia, S. Fidler, M. Fritz, and T. Darrell, A Probabilistic Model for Recursive Factorized Image Features, CVPR 2011, 8pp

101. Y. Jia and T. Darrell, Heavy-tailed Distances for Gradient Based Image Descriptors, NIPS 2011, 8pp.

102. R. Farrell, O. Oza, N. Zhang, V. Morariu, T. Darrell, and L. Davis, Birdlets: Subordinate Categorization Using Volumetric Primitives and Pose-Normalized Appearance, ICCV 2011, 8pp.

103. T. Tuytelaars, M. Fritz, K. Saenko, and T. Darrell, The NBNN Kernel, ICCV 2011, 8pp.

104. Y. Jia, M. Salzmann, and T. Darrell, Learning Cross-modality Similarity for Multinomial Data, ICCV 2011, 8pp.

105. S. Karayev, A. Janoch, Y. Jia, J. Barron, M. Fritz, K. Saenko, and T. Darrell, A Category-level 3-D Database: Putting the Kinect to Work, in ICCV 2011 Workshop on Consumer Depth Cameras for Computer Vision, 2011, 8pp.

106. H O. Song, M. Fritz, C. Gu and T. Darrell, Visual Grasp Affordances From Appearance-Based Cues, ICCV Workshop on Challenges and Opportunities in Robot Perception, 2011, 8pp.

107. P. Wang, S. Miller, M. Fritz, T. Darrell, and P. Abbeel, Perception for the Manipulation of Socks, IROS 2011, 8pp.

108. K. Saenko, Y. Jia, M. Fritz, J. Long, A. Janoch, A. Shyr, S. Karayev and T. Darrell, Practical 3-D Object Detection Using Category and Instance-Level Appearance Models, IROS 2011, 8pp.

109. S. Miller, M. Fritz, T. Darrell, and P. Abbeel, Parametrized Shape Models for Clothing, ICRA 2011, 8pp.

Other Major Publications

CURRICULUM VITAE OF TREVOR J. DARRELL

1. Darrell, T. and A. Pentland, "Robust Estimation of a Multi-Layer Motion Representation," in *Proceedings, IEEE Workshop on Visual Motion*, IEEE Computer Society Press, Princeton, NJ, pp. 173-178, 1991.

2. Essa, I., T. Darrell, and A. Pentland, "Tracking Facial Motion," in *Proceedings, IEEE Workshop on Motion of Nonrigid and Articulated Objects*, IEEE Computer Society Press, pp. 36-42, 1994.

3. Pentland, A., T. Darrell, A. Azarbayejani, and S. Sclaroff, "Visually Guided Animation," in *Proceedings, IEEE Conf. on Computer Animation*, IEEE Computer Society Press, Geneva, pp. 112-121,1994.

4. Darrell, T., P. Maes, B. Blumberg, and A. Pentland, "A Novel Environment for Situated Vision and Behavior," in *Proceedings, CVPR'94 Workshop on Visual Behaviors*, June 1994; also in *Exploratory vision: the active eye, Springer-Verlag, pp.319-331. 1996*.

5. Darrell, T., A. Azarbayejani, and A. Pentland, "Robust Estimation of Multiple Models in the Structure from Motion Domain," in *Proceedings, IEEE Workshop on Performance vs. Methodology*, Seattle, WA, June 1994.

6. Maes, P., T. Darrell, B. Blumberg, and A. Pentland, "The ALIVE System: Full-Body Interaction with Autonomous Agents," in *Proceedings, IEEE Conf. on Computer Animation*, IEEE Computer Society Press, Geneva, Switzerland, pp. 11-18, April 1995.

7. Darrell, T. and A. Pentland, "Attention-driven Expression and Gesture Analysis in an Interactive Environment," in *Proceedings, Intl. Workshop on Automatic Face and Gesture Recognition*, Zurich, Switzerland, pp. 135-140, June 1995.

8. Darrell, T., G. Gordon, J. Woodfill, H.H. Baker, and M. Harville, "Robust, real-time people tracking in open environments using integrated stereo, color, and face detection," *IEEE ICCV Workshop on Visual Surveillance*, Bombay, India, pp. 26-28, January 1998.

9. Darrell, T., G. Gordon, M. Harville, and J. Woodfill, "A Virtual Mirror Interface using Real-time Robust Face Tracking," *Proceedings of the Conference on Automatic Face and Gesture Recognition,* Nara, Japan, pp. 616-622, April 1998.

10. Wilson, K., N. Checka, D. Demirdjian, and T. Darrell, "Audio-Video Array Source Separation for Perceptual User Interfaces," *Perceptive User Interfaces 2001 vol. 2*, Orlando, FL, pp. 1-7, November 2001.

11. Fisher, J. and T. Darrell, "Signal-Level Audio Video Fusion Using Information Theory," *Perceptive User Interfaces 2001 vol. 1*, Orlando, FL, pp. 1-7, November 2001.

12. Taycher, L. and T. Darrell, "Range Segmentation Using Visibility Constraints," *Proceedings, IEEE CVPR Workshop on Stereo and Multi-Baseline Vision*, Kauai, HI, pp. 89-98, December 2001.

13. Demirdjian, D. and T. Darrell., "Using Multiple-Hypothesis Disparity Maps and Image Velocity for 3-D Motion Estimation," *Proceedings, IEEE CVPR Workshop on Stereo and Multi-Baseline Vision*, Kauai, HI, pp. 219-222, December 2001.

14. Taycher, L, J. Fisher, and T. Darrell, "Recovering Articulated Model Topology from Observed Motion," *Proceedings, ECCV Workshop on Statistical Methods in Video Processing*, Copenhagen, pp. 1311-1318, 2002.

15. Oh, A., H. Fox, M. von Kleek, A. Adler, K. Gajos, L.-P. Morency, and T. Darrell, "Evaluating Look-to-Talk: A Gaze-Aware Interface in a Collaborative Environment." (extended abstract) *Proceedings, Conference on Human Factors in Computer Systems (CHI '02)*, Minneapolis, MI, pp. 650-651, April 2002.

16. Shakhnarovich, G. and T. Darrell, "On Probabilistic Combination of Face and Gait Cues for Identification," *Proceedings of the International Conference on Automatic Face and Gesture Recognition (FG'02)*, Washington D.C., pp. 176-181, May 2002.

17. Morency, L.-P., A. Rahimi, N. Checka , and T. Darrell, "Fast Stereo-Based Head Tracking for Interactive Environments," *Proceedings of the International Conference on Face and Gesture Recognition*, Washington D.C., pp. 390-395, May 2002.

18. Wilson, K. and T. Darrell, "Audio-Video Array Source Localization for Intelligent Environments," *Proceedings, International Conference Acoustics Speech and Signal Processing (ICASSP '02)*, Orlando, FL, pp. 2109-2112, May 2002.

19. Darrell, T., J. Fisher, and K. Wilson, "Geometric and statistical approaches to audiovisual segmentation for untethered interaction," *International CLASS Workshop on Multimodal Dialog Systems*, Copenhagen, Denmark, 2002; also in *Advances in Natural Multimodal Dialog Systems*, Springer, pp 175-194, 2006.

20. Morency, L.-P., A. Rahimi, and T. Darrell, "Fast 3D Model Acquisition from Stereo Images," *Proceedings 3D Data Processing Visualization and Transmission*, Padova, Italy, pp. 172-176, June 2002

21. Morency, L.-P. and T. Darrell, "Stereo Tracking using ICP and Normal Flow," *Proceedings International Conference on Pattern Recognition*, Quebec, Canada, pp. 367-372, August 2002.

22. Rahimi, A. and T. Darrell, "Bayesian Network for Online Global Pose Estimation," *International Conference on Intelligent Robots and Systems*, Lausanne, Switzerland, pp. 427-433, October 2002

23. Tollmar, K., D. Demirdjian, D., and T. Darrell, "Gesture + Play: Exploring Full Body Navigation for Virtual Environments," in *Proc. of CVPR Workshop on HCI*, Madison, WI, June 2003; also ACM Conference on Human-Computer Interaction (CHI '03) Formal Demonstration, Ft. Lauderdale, pp. 620-621, April 2003.

24. Checka, N., K. Wilson, V. Rangarajan, and T. Darrell, "A Probabilistic Framework for Multi-modal Multi-person Tracking," *Proceedings of CVPR Workshop on Multi-Object Tracking*, Madison, WI, June 2003.

25. Morency, L., P. Sundberg, and T. Darrell, "Pose Estimation using 3D View-Based Eigenspaces," *ICCV Workshop on Analysis and Modeling of Faces and Gestures*, Nice, France, pp. 45-52, October 2003.

26. Taycher, L. and T. Darrell, "Bayesian Articulated Tracking Using Single Frame Pose Sampling." *Proceedings, International Workshop on Statistical and Computational Theories of Vision*, Nice, France, October 2003.

27. Yeh, T., K. Tollmar, and T. Darrell, "IDeixis: Image Based Deixis for Finding Location-Based Information," *ACM Conference on Human-Computer Interaction (CHI '04)* Formal Demonstration, pp.781-782; also accepted to Video Proceedings, Vienna, Austria, April 2004.

28. Lee, C., N. Lesh, C. Sidner, L. Morency, A. Kapoor, and T. Darrell, "Nodding in Conversations With a Robot," *ACM Conference on Human-Computer Interaction (CHI '04)* Formal Demonstration, Vienna, Austria, pp.785-786, April 2004.

29. Checka, N., K. Wilson, M. Siracusa, and T. Darrell, "Multiple Person and Speaker Activity Tracking with a Particle Filter," *Proceedings, International Conference on Acoustics, Speech, and Signal Processing (ICASSP '04)*, Montreal, Quebec, pp. 881-884, May 2004

30. Grauman, K., G. Shakhnarovich, and T. Darrell, "Virtual Visual Hulls: Example-Based 3D Shape Inference from a Single Silhouette," in *Proceedings of the 2nd Workshop on Statistical Methods in Video Processing, in conjunction with ECCV 2004*, Prague, Czech Republic, pp. 26-37, May 2004.

31. Taycher, L., J.W. Fisher, and T. Darrell,, "Combining Simple Models to Approximate Complex Dynamics," *Proceeding,s ECCV Workshop Statistical Methods in Video Processing*, Prague, Czech Republic, pp. 94-104, May 2004.

32. Tollmar, K., T. Yeh, and T. Darrell, "IDeixis - Searching the Web with Mobile Images for Location-Based Information," *Proceedings, Mobile HCI '04*, Glasgow, UK, pp. 288-299, September 2004.

33. Tollmar, K., D. Demirdjian, and T. Darrell,, "Navigating in Virtual Environments using a Vision-based Interface," in *Proceedings of NordiCHI*, Tampere, Finland, pp. 112-120, October 2004.

34. Taycher, L., J.W. Fisher, and T. Darrell, "Incorporating Object Tracking Feedback into Background Maintenance Framework," *Proceedings, IEEE Motion Workshop*, Breckenridge, CO, pp. 120-125, January 2005.

35. Yeh, T. and T. Darrell, "Doubleshot: an interactive user-aided segmentation tool," *International Conference on Intelligent User Interfaces (IUI'05)* (short paper), San Diego, CA, pp. 287-289, January 2005.

36. Shakhnarovich G., and Darrell, T., "Learning task-specific visual similarity", *Learning Workshop 2005,* 2pp., Snowbird, UT.

37. Quattoni. A., M. Collins, and T. Darrell, "Conditional Random Fields for Object Recognition", *Learning Workshop 2005,* 2pp., Snowbird, UT.

38. Wilson, K. and T. Darrell, "Improving Audio Source Localization by Learning the Precedence Effect," *Proceedings, International Conference on Acoustics, Speech, and Signal Processing (ICASSP '05)*, Philadelphia, PA , pp. 1125-1128, March 2005

39. K. Saenko, K. Livescu, J. Glass, and T. Darrell, "Production Domain Modeling of Pronunciation for Visual Speech Recognition," *Proceedings, International Conference on Acoustics, Speech, and Signal Processing (ICASSP '05)*, Philadelphia, PA, pp. 1424-1431, March 2005

40. Quattoni, A., M. Collins, and T. Darrell, "Incorporating Semantic Constraints into a Discriminative Categorization and Labeling Model", *ICCV Workshop on Semantic Knowledge in Computer Vision*, *http://www.research.ge.com/ vision/skcv05/*, 5 pp., abstract at *Proceedings ICCV 2005,* p. 1877, 2005.

41. Quattoni, A., M. Collins, and T. Darrell, "Learning Visual Representations using Images with Captions", *Learning Workshop*, San Juan, Puerto Rico, 2 pp., March 2007.

42. Saenko, K. and T. Darrell, "Object Category Recognition Using Probabilistic Fusion of Speech and Image Classifiers". *Proc. Machine Learning for Multimodal Interfaces (MLMI07)*, pp. 36-47, Brno, Czech Republic., June 2007

43. Morency, L.-P. and T. Darrell: "Conditional Sequence Model for Context-Based Recognition of Gaze Aversion". *Proc. Machine Learning for Multimodal Interfaces (MLMI07)*, pp. 11-23, Brno, Czech Republic., June 2007

44. Yeh, T., and T. Darrell, "Multimodal Question Answering for Mobile Devices", *IUI 2008* (short paper), Pages 405-408, ACM, 2008

45. Yeh, T., J. Lee, and T. Darrell, "Scalable classifiers for Internet vision tasks", *IEEE Workshop on Internet Vision*, 8 pp., Anchorage, AK, June 2008

46. Urtasun, R. and T. Darrell, "Local Probabilistic Regression for Activity-Independent Human Pose Inference." *In Learning Workshop 2008*, Snowbird, Utah, April 2008

47. Urtasun, R, A. Quattoni, N. D. Lawrence and T. Darrell, "Transfering Nonlinear Representations using Gaussian Processes with a Shared Latent Space" In *Learning Workshop 2008,* Snowbird, Utah, April 2008

48. Christoudias, M., R. Urtasun, A. Kapoor, and T. Darrell, "Co-training with Noisy Perceptual Observations", to appear *Learning Workshop 2009,* 2pp., Clearwater, FL, April 2009

49. Urtasun, R., A., Geiger and T. Darrell, "Rank Priors for Continuous Non-Linear Dimensionality Reduction", to appear *Learning Workshop 2009,* 2pp., Clearwater, FL, April 2009

50. M. Salzmann, C. H. Ek, R. Urtasun, and T. Darrell. "FOLS: Factorized orthogonal latent spaces". In Learning Workshop, Snowbird, April 2010

51. Saenko, K., B. Kulis, M. Fritz, and T. Darrell, "Image Domain Adaptation Using Metric Learning", In Learning Workshop, Snowbird, April 2010

V. Invited Lectures

"Real-time Gesture Recognition": Stanford Assoc. Perception Seminar (SAPS), Stanford U., Stanford, CA; D. Heeger, host; March 1994; Vision Group Seminar, Xerox Palo Alto Research Center (PARC), Palo Alto, CA; M. Black, host; March 1994; Virtual Reality Group Seminar, NASA Ames Research Center, Menlo Park, CA; U. Bucher, host; March 1994.

"Looking at People": Research Seminar, Signal Processing Research Laboratory, NEC Corporation, Kanagawa, Japan; A. Yamada, host; October 1994; Research Seminar, CAD/CAM Laboratory, Korea Institute of Science and Technology (KIST), Seoul, Korea; H. Ko, host; October 1994.

 "Vision for Human-Computer Interface": Mobile Robotics and Vision Group, Osaka University, Osaka, Japan; M. Asada, host; March 1995; Autonomous Agents Group, ATR Laboratories, Kyoto, Japan; K. Mase, host; March 1995.

"Perceptual Computer Interfaces" Computer Science Colloquium, University of Pennsylvania, D. Metaxis, host, October 97; Computer Vision Group Seminar, University of Maryland, Y. Yacoob, host, October 97; AI Seminar, UC Berkeley, J.Malik, host, March 97; Seminar in People, Computers, Design, Stanford University, T. Winograd, host, October 1996.

"Computer Vision for Interactive Interfaces", Intel Corporation, Santa Clara, November 1998.

 "Computer Vision Tutorial," User Interface Software Technology Conference (UIST '00), San Diego, 2000

 "Robust Visual Analysis for Perceptual User Interfaces," Microsoft Research, S. Shafer host, March 2000; SRI International, B. Marks, host, March 2000.

 "Perceptive Context for Pervasive Computing," OGI HCI Lecture series, S. Oviatt, host, August 2001; University of Tokyo ISMMS Seminar, K Ikeuchi host, March 2002.

"Vision for non-verbal conversation cues: speaker segregation, visual attention, and deictic reference," Cambridge University, R. Cippola, host, October 2002.

"Computer Vision for Human Computer Interface Tutorial," ACM CHI Conference, Ft. Lauderdale, FL, 2003.

"Computer Vision for Perceptual Context and Multimodal Interface," Boston University, S. Sclaroff, host., November 2003; Dartmouth College, H. Farid, host, March 2003; IBM Watson, C. Neti, host, March 2003.

"Visual Conversation Cues and Perceptive Devices," Johns Hopkins University, G Hager, host, December 2004.

"Visual Recognition for Perceptive Interfaces", Oxford University, A. Fitzgibbons, host, March 2005; Cambridge University, R. Cipolla, host, March 2005; KTH-Stockholm, J.-O. Eklund, host, March 2005.

"Efficient image matching and perceptually situated searching", Google Inc., M. Covell., host, November 2005; Yahoo Labs, M. Davis, host, December 2005.

"Visual Recognition and Tracking for Perceptive Interfaces", Stanford University CS Broad Area Colloqium, D. Koller, host, May 2006; Columbia University, S. Nayar, host, September 2006; CMU, A. Efros, host, September 2006; Microsoft Research, R. Szeliski, host, September 2006; University of Toronto, D. Fleet, host, September 2006; UCSD, D. Kriegman, host, October 2006; USC, G. Medioni, host, October 2006; University of Maryland, L. Davis, host, October 2006; UCLA, S. Soatto, host, November 2006.

"New Representations for Visual Recognition," Woods Hole Oceanographic Institution, Hanumant Singh, host, July 2006.

"Recent results on tracking and recognition," Oxford University, A. Zisserman, host, August 2006.

"Visual Learning and Multimodal Interaction". Dagstuhl Seminar, J.-O. Eklund chair, June 2007; International Computer Science Institute Seminar, June 2007; UC Berkeley EECS Seminar, September 2007

"Image Context, Efficient Indexing, and Sense-Specific Category Models", Dagstuhl Seminar, S. Boll chair, June 2008

"Visual Grounding for Robots and Mobile Interfaces", UC Berkeley EECS Seminar, September 2008

"Image Recognition Interfaces", ICSI-BEARS Conference, February 2009; Keynote Talk, ACM Intelligent User Interfaces Conference, February 2009

"Learning Representations for Visual Recognition", UC Berkeley EECS Seminar, May 2010, Bay Area Vision Meeting Feb 2011, KTH April 2011, MPI April 2011.

VI. Students Supervised (Completed)

Masters (S.M, MIT.):

Morency, Louis-Philippe, "Stereo-based head post tracking using Iterative Closest Point and normal flow constraint," 2002

Checka, Neal, "Probabilistic framework for multi-modal multiple person tracking," 2002

Grauman, Grauman, L., "A statistical image-based model for visual hull reconstruction and 3D structure inference," 2003

Yeh, Pei-Hsiu (Tom), "IDeixis: image-based ideixis for recognizing locations," 2004

Christoudias, C., Mario, "Light field appearance manifolds," 2004

Saenko, Ekaterina - joint with Glass, James, "Articulatory features for robust speech recognition," 2004

Siracusa, Michael - joint with Fisher, John, W., "Statistical modeling and analysis of audio-visual association in speech," 2004

Ariadna Quattoni - joint with M. Collins, "Object Recognition with a Latent Conditional Random Field", 2005

Masters (M.Eng., MIT)

Smith-Michelson, Jared, "Design and Application of a head detection and tracking system", 2000

Villoria, John, A., "Optimizing clustering algorithms for computer vision," 2001

Rania, Kalaf Y., "Multi-person tracking using dynamic programming," 2001

Rangarajan, Vibav, S., "Interfacing speech recognition and vision-guided microphone array technologies," 2003

Bentley, Frank, H., "A widget-based architecture for perceptive presence," 2003

Ko, Theresa, H., "Untethered human motion recognition for a multi-model interface," 2003

Sundberg, Patrik, P., "Pose estimation using cascade trees," 2004

Ross, Benjamin, "Comparision of nearest neighbor methods," 2004

Goela, Naveen, "Matching and compressing sequences of visual hulls," 2004

Dunagan, Brian, "Tracking with constraints in a web of sensors," 2004

You, Shuang, "Fast pedestrian detection with efficient thermal features", 2005

Lee, John, "Efficient Object Recognition and Image Retrieval for Large-Scale Applications" *(won Johnson award for outstanding CS M.Eng. thesis)*

Ph.D (MIT).

Shakhnarovich, Gregory, "Learning Features for Visual Classification", Oct. 2005 [Assistant Professor, TTI-Chicago]

Rahimi, Ali, "Learning to Transform Time Series with a Few Examples", Oct. 2005 [Intel Research, Berkeley]

Wilson, Kevin, "Learning Uncertainty Models for Audiovisual Speech Source Localization in Real-World Environments", Aug 2006 [Research Scientist, Mitsubishi Electric Research Labs, Cambridge (MERL)]

Taycher, Leonid, "Statistical methods for dynamic visual processing", Aug 2006 [Google Boston]

Grauman, Kristen, "Matching sets of features for efficient retrieval and recognition", Aug. 2006 [Assistant Professor, CS, University of Texas, Austin]

Morency, Louis-Philippe, "Dialogue Context and Visual Gesture Recognition", Oct 2006 [Research Scientist, University of Southern California ICT]

Wang, Sy Bor, "Detecting Communication Errors from visual cues during the system's conversational turn", Aug 2008. [Trimble Navigations, Silicon Valley]

Yeh, Tom, "Situated Mobile Media Search", May 2009. [Postdoc, UMD]

Quattoni, Ariadna, joint with M. Collins, "Transfer Learning Algorithms for Image Classification", May 2009, [Postdoc, U. Barcelona]

Christoudas, Mario, "Co-training for Multimodal Gesture Recognition", June 2009. [Postdoc, MIT & EPFL]

Saenko, Kate, "Image Sense Disambiguation: A Multimodal Approach". Doctoral Thesis", August 2009 [Postdoc, MIT & Harvard]

Ph.D (UCB).

Ashley Eden, "Finding Lost Children", December 2010 [Dreamworks]

Alex Shyr, "Incorporating Supervision in Visual Recognition and Segmentation", May 2011

UC Berkeley Quals. Exam Committee:

Ashley Eden (Advisor)
Alex Shyr (Advisor)
Daphne Bushbaum (external)
Mary Knox (member)
Jack Culpepper UCB (chair)
Chunhui Gu UCB (chair)
Michael Maire UCB (chair)
Subransu Maji UCB (chair)
Lester Mackey (member)

Current Postdocs

Name	Dates of Appointment	PhD Granting Institution	Curr. Position

Brian Kulis	1/2009-present	UT Austin	Postdoc (to start
	Asst. Prof, Ohio State, January 2012)		
Kate Saenko	9/2009-present	MIT	Postdoc (joint w/
	Harvard U.)		

Previous Postdocs

Name	Title	Current Employer	Current Position
Konrad Tollmar	Postdoctoral Lecturer	Lund University	Associate Professor
David Demirdjian	Postdoctoral Researcher	Toyota Research	Research Scientist
Raquel Urtasun	Postdoctoral Researcher	TTI-C	Asst. Prof.
Mario Fritz	Postdoctoral Researcher	MPI	Junior Prof.
Mathieu Salsmann	Postdoctoral Researcher	TTI-C	Asst. Prof
Mario Christoudias	Postdoctoral Researcher	EPFL	Postdoc