I. Education:

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

II. Experience:

<u>Employer</u>	Position	<u>Beginning</u>	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 Leader	2008	present
UC Berkeley CS	Associate Adjunct Professor	2008	2011
UC Berkeley CS	Professor in Residence	2011	present

III. Professional Service:

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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

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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	2006	2006
Reaction Study		
Chair, Exploitation of Persistent Operational Surveillance	2007	2007
(EXPOSE) Study		
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

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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.
- 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.
- 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.
- 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.
- 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.

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- 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.
- 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.
- 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.
- 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:

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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

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