CURRICULUM VITAE

Name: Hemant D. Tagare

Occupation: Associate Professor with Tenure, Yale University.

Personal Information:

Citizenship: U.S.A.
Address: 32 Manomet Ave., North Haven, CT 06473
Phone: (203) 737 4271 (Off.), (203) 239 3456 (Hm.)
Email: hemant.tagare@yale.edu

Research Interests:

I am interested in foundational issues as well as new and innovative approaches to bio-medical image analysis, especially in Cryogenic electron microscopy, image segmentation, non-rigid registration, and image matching. My research is used by the National Institutes of Health (N.I.H.) and the National Oceanic and Atmospheric Administration (N.O.A.A.) to analyze bio-medical images.

I collaborate with mathematicians, biologists, bio-physicists, and physicians.

Education:

Ph.D., May 1990, Electrical and Computer Engineering, Rice University, Houston,TX.
M.S., May 1983, Electrical Engineering, Rice University, Houston, TX.
B. Tech., Aug. 1981, Electrical Engineering, Indian Institute of Technology, Bombay, India.

Career:

Jan 2005 – Present, Associate Professor with Tenure, Department of Diagnostic Radiology, Department of Biomedical Engineering, and the Department of Electrical Engineering, Yale University.

July 2000 – Dec 2004, Associate Professor, Department of Diagnostic Radiology, and the Department of Electrical Engineering, Yale University.

July 1994 - July 2000, Assistant Professor, Department of Diagnostic Radiology, and the Department of Electrical Engineering,Yale University.

Sept. 1991 - July 1994, Associate Research Scientist, Department of Computer Science, Department of Diagnostic Radiology, Yale University.

Sept. 1990 - Sept. 1991, Post-Doctoral Associate, Department of Diagnostic Radiology, Yale University.

1983 - 1986, Design Engineer, Madhav Electronics, Bombay, India.

Professional Honors:

Best poster award, "Tunnelling Descent: A New Algorithm for Active Contour Segmentation of Ultrasound Images," Information Processing in Medical Images, 2003.

My research in medical image processing was showcased by the National Institutes of Health during the R\"{o}ntgen Centenary Celebrations in Washington D.C., 1995.

The Francois Erbsmann Award (Honorable Mention), for outstanding paper by young scientist in image processing applications to medicine, 1993.

National Science Talent Search Scholarship, Government of India, 1977.

Grants:

1. **Agency**: National Heart, Lung, and Blood Institute, NIH.
   Title: Segmentation of Ultrasound Images.
   P.I: Hemant D. Tagare
   Total Amount: $1,556,175.00
   Beginning and Ending Dates: 07/01/06 - 06/30/10.

2. **Agency**: National Library of Medicine, NLM.
   Title: Constrained Maximum-likelihood Cryo-EM Reconstruction in Proteomics
   P.I: Hemant D. Tagare
   Total Amount: $160,071.00
   Beginning and Ending Dates: 07/01/07 - 06/30/09.

3. **Agency**: National Institute of General Medicine
   Title: Atomic Resolution in Biological Electron Microscopy
   P.I.: Stephen Harrison
   Beginning and Enging Dates: 05/15/07 - 05/14/11

4. **Agency**: National Library of Medicine.
   Title: High Dimensional Indexing in Medical Image Databases.
   P.I: Hemant D. Tagare
   Total Amount: $947,580.00
   Beginning and Ending Dates: 12/01/03-11/30/06.

5. **Agency**: National Library of Medicine
   Title: Shape-based Retrieval in Medical Image Databases.
   P.I: Hemant D. Tagare
   Total Amount: $645,675.00
   Beginning and Ending Dates: 06/01/2000-05/31/2004.

6. **Agency**: National Institute for Biomedical Imaging and Bioengineering
   Title: Bioimaging and Intervention in Neocortical Epilepsy
   P.I: James S. Duncan

7. **Agency**: The Whitaker Foundation.
   Title: Multiresolution Analysis of 3-D Heart Motion Heterogeneity.
   P.I: Hemant D. Tagare
   Total Amount: $180,000
   Beginning and Ending Dates: 7/1/94-6/30/97.

8. **Agency**: National Library of Medicine.
   Title: Indexing of Electronic Medical Image Databases.
   P.I: C. Carl Jaffe
   Total Amount: $ 583,123
   Beginning and Ending Dates: 5/1/93-4/30/96.
   Total Amount: $7,369,146
   Beginning and Ending Dates: 04/1/02-03/31/07.

9. **Agency**: National Library of Medicine.
   Title: Indexing Image Databases for Motion Similarity Retrieval.
   P.I: C. Carl Jaffe
   Total Amount: $936,664
   Beginning and Ending Dates: 7/1/96-6/30/00.

Invited Talks:

"A Geometric Framework for Non-rigid Registration and Correspondence," S.I.A.M. Conference on Imaging Science, San Diego, 2008.

"Maximum Likelihood Segmentation of Cardiac Ultrasound Images," Dept. of Electrical Engineering, Vanderbilt University, Nashville, Aug. 2007.

"Maximum Likelihood Segmentation of Cardiac Ultrasound Images," Dept. of Computer Science, University of North Carolina, Chapel Hill, Apr. 2007.

"A Geometric Framework for Non-rigid Registration and Correspondence," Department of Electrical Engineering, Princeton University, April. 2007.

"A Geometric Framework for Non-rigid Registration and Correspondence," Vanderbilt University Institute for Imaging, Vanderbilt University, Mar. 2007.

"Maximum Likelihood Segmentation of Cardiac Ultrasound Images," Dept. of Medical Physics, University of Wisconsin, Madison, WI, Mar. 2007.

"A Geometric Framework for Non-rigid Registration and Correspondence," Dept. of Computer Science, University of North Carolina, Nov. 2006.

"Maximum Likelihood Segmentation of Cardiac Ultrasound Images," Conf. On Partial Differential Equations and Applications, Univ. of Florida Dept. of Mathematics, Nov. 2005.

"Maximum Likelihood Segmentation of Cardiac Ultrasound Images," National Institutes of Health, Bethesda, MD. August 2005.

"Maximum Likelihood Ultrasound Segmentation with Level Sets," American Mathematical Society, 2004 Fall Eastern Section Meeting, Pittsburgh, Nov. 2004.

"Segmenting Cardiac Ultrasound Images with Active Contours," Institute for Pure and Applied Mathematics, University of California, Sept. 2004.

"Curve and Surface Problems in Medical Imaging," Dept. of Biomedical Engineering, Ohio State University. May 2004.

"Non-rigid Correspondences Between Curves and Surfaces in Medical Images," Dept. of Electrical Engineering, University of California, Riverside, May 2004.

"Non-rigid Correspondences Between Curves and Surfaces in Medical Images," University of California, Irvine, Oct. 2003.

"Medical Image Databases," National Library of Medicine, May 2002.

"An Introduction to Shape Spaces," National Institutes of Health, May 2002.

"Active Contours and Deformable Models," National Institutes of Health, Sept. 2000.

"The Variational Approach to Image Processing", National Institutes of Health, Sept. 2000.

"Active Contour Models for Image Segmentation," 2000 S.I.A.M. Annual Meeting, Puerto Rico, July 2000.

"Image Segmentation," Dept. of Mathematics, University of Florida, Dec. 1999.

"Shape-based Non-rigid Correspondence," S.I.A.M. SEAS Conf., Knoxville, TN, March 1999.

"Non-rigid Correspondence in Medical Imaging," University of Utrecht, Utrecht, The Netherlands, August 1996.

"Shape-based Non-rigid Correspondence," N. E. C. Research Labs, NJ, 1996.

"Medical Image Databases," University of Texas Medical Branch, Galveston, TX, 1994.

"How to Describe and Compare Arrangements of Parts of an Object," National Science Foundation, Geometry Workshop, Southampton, MA, 1993.

"Image Databases,"I. B. M. Research, NY, 1992.

"Research Issues in Medical Image Databases," National Cancer Institute, Washington D.C., 1992.

"Medical Image Databases," National Library of Medicine, Washington D.C., 1992.

"Medical Image Databases: Retrieval by Similarity," National Library of Medicine, Washington D.C., 1991.

Thesis/Research Supervision:

Post-Docs:

Dr. Yong Yue, Dr. Xiaoning Qian, Dr. Eric Bardinet, Dr. Glynn Robinson.

Ph.D. Thesis:

Xiaoning Qian , “Medical Image Databases with Retrieval by Shape Similarity,” Yale University, 2005.
James Beaty, “Automated Detection of Colon Polyps,” Yale University, 2005.
Zhong Tao, “Segmentation of Ultrasouns Images,” Yale University, 2005.
Tianyun Ma, ``Active Contour Models: Consistency, Stability, and Parameter Estimation," Yale University, 1998.

Master's Thesis:

Co-advisor to James Beatty, ``Remote Data Acquisition System," University of Connecticut, 1999.

Senior Projects:

Josh Motelow, “Segmentation of Soft Plaque in CT images,” Yale University, 2005.
Raju Shah, ``FPGA-based Stereo Vision System," Yale University, 1999.

Publications:

1. Tagare H.D., Groisser D., Skrinjar O., “Symmetric Non-rigid Registration: A Geometric Theory and Some Numerical Techniques”, Journal of Mathematical Imaging and Vision 2008.
2. Tagare H. D., Sigworth F., Barthel A., “Fast, Adaptive Expectation-Maximization for Cryo-EM”, MICCAI 2008 (Accepted).
3. Yue Y., Tagare H. D., Madsen E. L., Frank G. R., Hobson M. A., “Evaluation of a Cardiac Ultrasound Segmentation Algorithm with a Phantom Study”, MICCAI 2008 (Accepted).
4. Bathula D. R., Tagare H.D., Staib L. H., Papademitris X., Schultz R. T., Duncan J. S. “Bayesian Analysis of fMRI Data with ICA Based Spatial Prior”, MICCAI 2008 (Accepted).
5. Chen F., Chen Y., Tagare H. D., “An Improvement of the Sine-Sinc Model Based on Log-Likelihood”, Intl. Conf. on Imag. Proc., Comp. Vis., Pat. Recog.(IPCV'08) 2008 (Accepted)
6. Tagare H. D., Chen Y., Fulbright R. K., “Comparison of EM-based and Level Set Partial Volume Segmentations of MR Brain Images”, (J. M. Reinhardt, J. P. W. Pluim, eds.), Medical Imaging 2208, Proc. SPIE vol6914, pp.69140N-1 - 69140N-7, 2008.

7. Yue Y., Tagare H. D., “Evaluation of a Level Set Segmentation Method for Cardiac Ultrasound Images”, S.P.I.E. Symposium on Medical Imaging, San Diego, 2008.
8. Pappu S., Dardik A., Tagare H. D., Gusberg R. J., “Beyond Fusiform and Sacular: A Novel Quantitative Tortuoisty Index May Help Classify Aneurism Shape And Predict Aneurism Rupture Potential,” Annals of Vascular Surgery, vol. 22 pp. 88-97, 2008 , 2007.
9. Tao Z., Tagare H. D., “Tunneling Descent; A New Strategy for M. A. P. Active Contour Evolution and its Application to Ultrasound Segmentation,” Medical Image Analysis ,(11), pp. 266-281, 2007.
10. Chen Y., Huang F., Tagare H. D., Rao M., “A Coupled Minimization Problem for Medical Image Segmentation with Priors”, Intl. Journal of Computer Vision, 71, pp. 259-272, March 2007.
11. Qian X., Tagare H.D., Fulbright R. K., Long R., Antani S., “Indexing of Complete and Partial 2-D Shapes for NHANES II,” MICCAI 2007, Australia, 2007.
12. Tao Z., Tagare H. D., Beaty J. D., “Evaluation of Four Probability Distribution Models for Speckle in Clinical Cardiac Ultrasound Images,” I. E. E. E. Trans. Medical Imaging, vol. 25, No. 11, pp. 1483-1491, Nov. 2006.
13. Tagare H. D., Groisser D., Skrinjar O. “A Geometric Theory of Symmetric Registration.” Mathematical Methods in Biomedical Image Analysis, Intl. Conference on Computer Vision and Pattern Recognition, New York, NY, 2006.
14. Qian X., Tagare H. D., “Segmentation of Rat Cardiac Ultrasound Images with Large Dropout Regions,” Mathematical Methods in Biomedical Image Analysis, Intl. Conference on Computer Vision and Pattern Recognition, New York NY, 2006.
15. Qian X., Tagare H. D., “Overcoming Dropout While Segmenting Cardiac Ultrasound Images,” Intl. Symposium on Biomedical. Imaging., pp.106-108, I.E.E.E. ,2006.Qian X., Tagare H. D., “Optimal Embedding for Shape Indexing in Medical Image Databases,” MICCAI, vol. 2, J. S. Duncan, G. Gerig (eds.), LNCS, 3750, pp. 337-384, Springer, 2005.
16. Tao Z., Tagare H. D., “Tunneling Descent Level Set Segmentation of Ultrasound Images,” Information Processing in Medical Images, G. E. Christensen, M. Sonka (eds.), LNCS 3565, pp.750-761, Springer, 2005.
17. Qian X., Tagare H. D., Fulbright R. K.,“Re-embedding vs. Clustering as Shape Indexing Strategies in Medical Image Databases,” SPIE Symposium on Medical Imaging, San Diego, 5748, pp. 144-151, 2005.
18. Tao Z., Tagare H. D., “Stopping Rules for Tunnelling Descent,” Proceedings S.P.I.E., M. J. Fitzpatrick, J. M. Reinhardt (eds.), pp.475-484, 2005.
19. Tagare H. D., Qian X., Fulbright R., Long R., Antani S., “Shape Based Retrieval in NHANES II,” Proc. 12th ACM International Conference on Multimedia, pp. 776-779, Oct. 2004, NY.
20. Qian X., Tagare H. D., Fulbright R., Long R., Antani S, “Shape Indexing in Medical Image Databases using Pre-Shape Embedding,” Distributed Databases and processing in Medical Image Computing, MICCAI, pp. 36-44, Sept. 2004.
21. J. Yang, H. Tagare, L. Staib and J. Duncan: Segmentation of 3D Deformable Objects with Level Set Based Prior Models. pp. 85-88, IEEE International Symposium on Biomedical Imaging, 2004.
22. Skrinjar, O., Chou, Y., and Tagare, H. D., “Symmetric, Transitive, Geometric Deformation and Intensity Variation Invariant Nonrigid Image Registration,” pp.920-923, IEEE International Symposium on Biomedical Imaging 2004.
23. Skrinjar, O., Chou, Y., and Tagare, H. D. “Transitive Nonrigid Image Registration with Application to Cardiac MR Image Sequences,” SPIE Symposium on Medical Imaging, February 2004.

24. Chen Y., Huang F., Tagare H. D., Rao M., “Using Prior Shape and Intensity Profile in Medical Image Segmentation,” I.E.E.E. International Conference on Computer Vision, Nice, France, Oct. 2003.
25. Tao Z. Jaffe C. C., Tagare H. D., “Tunneling Descent: A New Algorithm for Active Contour Segmentation of Ultrasound Images,” Information Processing in Medical Images, Taylor C., Noble J. A., (eds.) pp.246-257, Springer, 2003.
26. Y. Chen, H. Tagare, S.R. Thiruvenkadam, F. Huang, D.Wilson, A. Geiser, K.Gopinath and R.Briggs, “Using Prior Shapes in Geometric Active Contours in a Variational Framework,” Intl. Journal of Computer Vision, 50(3), 315-328, 2002.
27. Tagare H. D., O’Shea D., Groisser D., “Shape Based Non-rigid Correspondence for Plane Curves,” Journal of Mathematical Imaging and Vision, 16:57-68, 2002.
28. G. R. Hillman, N. Kehtarnavaz, B. Wursig, B. Araabi, G. Gailey, D. Weller, S. Mandava, H. Tagare, "Finscan", a Computer System for Photographic Identification of Marine Animals, 2nd Joint EMBS-BMES Conference, Houston, Oct. 2002.
29. Qian X., Tagare H. D., “Optimally Adapted Indexing Trees for Medical Image Databases,” Intl. Symp. on Biomedical Imaging, Washington D.C. July 2002.
30. Tao Z., Beaty J., Jaffe C. C., Tagare H.D., “Gray Level Models for Segmenting Myocardium and Blood in Ultrasound Images,” Intl. Symp. on Biomedical Imaging, Washington D.C. July 2002.
31. Tagare H. D., Toyama K., Wang J., “A Maximum-likelihood Strategy for Directing Attention,” I.E.E.E. Trans. Pat. Anal. Mach. Intell., vol. 23, No. 5, pp. 490-500, May 2001.
32. Chen Y., Thiruvenkadam S., Tagare H. D., Huang F., Wilson D., “On the Incorporation of Shape Priors into Geometric Active Contours,” I.E.E.E. Workshop in Variational and Level Set Methods in Computer Vision,8th International Conference on Computer Vision, Canada, July 2001.
33. Tagare H. D. ,``Efficient Retrieval in Image Databases," S.P.I.E. Conf., San Diego, July 2000.
34. Tagare H. D., ``Bias and Stability of Actice Contours," S.I.A.M. Annual Symposium, Peurto Rico, June 2000.
35. Skrinjar O., Tagare H. D. and Duncan J. S., Surface Growing from Stereo Images, IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2000), Hilton Head Island, SC, USA, June 2000.
36. Ma T., Tagare H. D., ``Bias and Stability of Active Contours with Euclidean and Non-Euclidean Arc-lengths", I.E.E.E. Trans. Image Processing, Vol. 8, No. 11, pp. 1549-1559, Nov. 1999.
37. Tagare H. D., ``Shape-Based Non-rigid Correspondence with Applications to Heart Motion Analysis," I.E.E.E. Trans. Medical Imaging, vol. 18, no. 7, pp. 570-579, July 1999.
38. Tagare H. D., ``A Family of Kernels for Averaging in the Presence of Template Jitter," Journal of Mathematical Imaging and Vision, vol. 10, 63-74, 1999.
39. Hillman, G.R., Würsig, B. Kehtarnavaz, N., Weller D.W., Kreho A., Drobyshevski, A., Elder, K., Araabi, B.N., McKinney, T., Gailey, G., Tagare, H. Individual identification of dolphins in field photographs: a computer-based system. 81. 1999. The Society for Marine Mammalogy. 13th Biennial Conference on the Biology of Marine Mammals. 99.
40. Tagare H. D., ``Shape-based Non-rigid Correspondence," S.I.A.M. SEAS Conf., Knoxville, TN, 1999.
41. Zeng X., Staib L., Schultz R., Tagare H., Win L. and Duncan J., ``A New Approach to 3D Sulcal Ribbon Surface Finding from MR Images." Second Intl. Conf. on Medical Image Computing and Computer-Assisted Intervention(MICCAI), Cambridge, UK, 1999.

42. Ma T., Tagare H. D., ``Bias and Stability in Active Contours with Euclidean and Non-Euclidean Arc-lengths," Workshop in Bio-Medical Image Analysis, I.E.E.E. Conf. on Computer Vision and Pattern Recognition, Santa Barbara, 1998.
43. Hillman G. R., Tagare H. D., Elder K., Drobyshevski A., Weller D., Wursig B., ``Shape Descriptors Computed from Photographs of Dolphin Dorsal Fins for use as Database Indices," 20th Annual Intl. Conf. IEEE Engineering in Medicine and Biology Society. Hong Kong, Nov. 1998.
44. Tagare H. D., McDermott D., Hong, X., ``Place Recognition for Mobile Robots," Intl. Conf. on Robotics and Automation, Belgium, 1998.
45. Tagare H. D., Jaffe C. C., and Duncan J.. "Medical image databases: A content-based retrieval approach". JAMIA, 4(3):184-198, 1997.
46. Tagare H. D., ``Deformable 2-D Template Matching Using Orthogonal Curves," I.E.E.E. Trans. on Medical Imaging, vol. 16, No. 1, pp. 108-117, Feb 1997.
47. Ghebreab S., Worring M., Tagare H. D., Jaffe C.C., ``SCHEMed: a visual tool for definition and data entry in medical image databases," I.E.E.E. Conf. Visual'97, San Diego, 1997.
48. Tagare, H. D., ``Efficient Retrieval Without a Metric," I.E.E.E. Conf. Visual'97, San Diego, 1997.
49. Tagare H. D., ``Increasing Retrieval Efficiency by Index Tree Adaptation," I.E.E.E. Workshop on Content-based Access of Image and Video Libraries, San Juan, 1997.
50. Tagare H. D., ``Non-rigid Curve Correspondence for Estimating Heart Motion," Information Processing in Medical Imaging, Vermont 1997.
51. Robinson G. P., Tagare H. D., Duncan J. S., Jaffe C. C.,``Medical Image Collection Indexing: Shape-Based Retrieval Using KD-Trees," , Comput. Medical Imaging and Graphics, Vol. 20, No. 4, pp. 209-217, 1996.
52. Tagare H. D., McDermott D., ``Model-Based Pose Proposal for 2-D Object Recognition," XIIIth Braz. Symp. on Artificial Intelligence, 1996.
53. Tagare H. D., Vos F., Jaffe C. C., Duncan J. S., ``Arrangement: A Qualitative Spatial Relation Between Parts," I.E.E.E. Trans. on Pattern Analysis and Machine Intelligence, Vol. 17., No. 9., pp. 880-893, Sept. 1995.
54. Tagare H. D., O'Shea D., Rangarajan A., ``A Geometric Criterion for Shape-Based Non-Rigid Correspondence," Intl. Conf. On Computer Vision, Boston, 1995.
55. Tagare H. D., ``Precomputed Orthogonal Curves for Deformable Template Matching,'' Information Processing in Medical Imaging, France, 1995.
56. Robinson G. P., Tagare H. D., ``Efficient Shape-Based Retrieval in Medical Information Databases Using KD-Trees," Information Processing in Medical Imaging, France, 1995.
57. Tagare H. D., Elder K. W., Stoner D. M., Patterson R. M.,Nicodemus C. L., Viegas S. F., Hillman G. R., `` Location and Geometric Description of Carpal Bones in CT Images," Annals of Biomedical Engineering, vol. 21, pp. 715-726, 1993.
58. Tagare H. D., deFigueiredo R. J. P., ``A Framework for the Construction of General Reflectance Maps for Machine Vision," Computer Vision, Graphics, and Image Processing: Image Understanding, Vol. 57, No. 3, pp. 265-282, May 1993.
59. Tagare H. D., Jaffe C. C., Duncan J. S., ``Arrangement: A Spatial Relation Comparing Part Embeddings and its Use in Medical Image Comparisons, " in Information Processing in Medical Imaging, Barrett H. H., Gmitro A. F. (eds.), Lecture Notes in Computer Science, 687, Springer Verlag, 1993.
60. Tagare H. D., deFigueiredo R. J. P., ``Simultaneous Estimation of Shape and Reflectance Map from Photometric Stereo," Computer Vision, Graphics, and Image Processing: Image Understanding, Vol. 55, No. 3, pp. 275-286, May 1992.

61. Tagare H. D., Jaffe C. C., Duncan J. S., ``Arrangements: ASpatial Relation for Describing and Comparing Part Embeddings," 11th IAPR International Conference on Pattern Recognition, The Hague, The Netherlands, Aug. 1992.
62. Hillman G. R., Kent T. A., Kaye A., Brunder D. G., and Tagare H. D., ``Measurement of Brain Compartment Volumes in MRI Using Partial Voxel Composition Calculations." Journal of Computed Assisted Tomography, 15(4), pp. 640-646, 1991.
63. Tagare, H. D., deFigueiredo, R. J. P., ``A Theory of Photometric Stereo for Diffuse, Non Lambertian Surfaces" I.E.E.E. Trans. on Pattern Analysis and Machine Intelligence, Vol. 13, No. 2, pp. 133-153, February 1991.(This paper was reprinted in the collection Physics Based Vision: Principles and Practices}, Shafer S. et al (eds.), Jones and Bartlett Publishers, 1993.)
64. Zubal G., Tagare H. D., Zhang L., Duncan J., ``3-D Registration of Intermodality Medical Images," (*Invited Paper*) 13th Annual Conference of the I.E.E.E. Engineering in Medicine and Biology Society, Orlando, FLA. October 31 - November 3, 1991.
65. Tagare, H. D., deFigueiredo, R. J. P., ``On the Localization Performance Measure and Optimal Edge Detection." I.E.E.E. Trans. on Pattern Analysis and Machine Intelligence, Vol. 12, No. 12, pp. 1186-1190, December 1990.
66. Tagare H. D., deFigueiredo R. J. P., ``Simultaneous Estimation of Shape and Reflectance Map from Photometric Stereo," International Conference on Computer Vision, Japan, Nov. 1990.
67. Tagare H. D., deFigueiredo R. J. P., (*Invited Paper*) ``Shading and Photometric Stereo," S.P.I.E. Symposium on Electronic Imaging, Santa Clara, C.A. Feb, 1990.
68. deFigueiredo R. J. P., Tagare H. D., ``Curves and Surfaces in Computer Vision," S.P.I.E. Symposium on Electronic Imaging, Santa Clara, C.A. Feb, 1990.
69. Tagare H. D., deFigueiredo R. J. P., ``On the Localization Performance Measure and Optimal Edge Detection," S.P.I.E. Symposium on Electronic Imaging, Santa Clara, C.A. Feb, 1990.
70. Tagare H. D., deFigueiredo R. J. P., ``A Theory of Photometric Stereo for a General Class of Reflectance Maps," I.E.E.E. Conf. on Computer Vision and Pattern Recognition, San Diego, 1989.
71. Tagare H. D., deFigueiredo R. J. P., ``A New Algorithm for Computing Projections on Smooth Convex Sets," Sixth Workshop on Multidimensional Signal Processing, Asilomar, California, Sept. 6-9 1989.
72. Markandey V., Tagare H. D., deFigueiredo R. J. P., ``A Technique for 3-D Robot Vision for Space Applications," Proceedings of the Space Telerobotics Workshop, J.P.L., CA, Jan 20-22, 1987.
73. Tagare, H. D., deFigueiredo, R. J. P., ``Order Filters," Proceedings of I.E.E.E., vol. 73, pp. 163-165, Jan. 1985.
74. Tagare H. D., deFigueiredo, R. J. P., ``Pitch Detection Based on Order Filtering.", Proceedings of the Princeton Conference on Information Sciences and Systems, Princeton, NJ, 1984.

Papers Submitted:

1. Yue Y, Tagare H. D., Madsen E. L., Frank G., Hobson M. A., “Comprehensive Evaluation of a Cardiac Ultrasound Segmentation Algorithm”, Submitted to Medical Image Analysis.

2. Qian X., Tagare H. D., Fulbright R. K., Long R., Antani S., "Optimal Embedding for Shape Indexing in Medical Image Databases," Submitted to I.E.E.E. Trans. On Knowledge Engineering.
3. *Groisser D., Tagare H. D., "On the Topology and Geometry of Spaces of Affine Shape," Submitted to the Journal of Mathematical Imaging and Vision.*

International/National Conference Committees:

Program Committee, Mathematical Methods in Biomedical Imaging Analysis, I.E.E.E., 2008.

Program Committee, Mathematical Foundations of Computational Anatomy, Denmark, 2006.

Conference Committee, Energy Minimization Methods in Computer Vision and Pattern Recognition, Florida, 2005.

Organizer, ACM Multimedia in Life and Health Sciences, New York, NY. Oct. 2004.

Conference Chair, Mathematical Methods in Biomedical Imaging, S.I.A.M., 2000.

Program Committee, I.E.E.E. Conf. Computer Vision Pattern Recognition, 2000.

Member, Conference Committee, Third International Conference on Visual Information Systems, Amsterdam, 1999.

Member, Conference Committee, XVth International Conference on Information Processing in Medical Imaging, Vermont, 1997.

Session Chair, 1997 S.P.I.E. Conf. on "3-D Computer Vision" in Boston, MA.

Member, Conference Committee, Workshop on Image Databases and Multi Media Search, Intl. Assoc. of Pattern Recognition, Amsterdam, The Netherlands, 1996.

Member, Conference Committee, Fifth Intl. Conf. on Data Engineering, New Orleans, LA, March 1996.

Session Chair, 1995 S.P.I.E. Conf. on ``3-D Computer Vision" in Philadelphia, Oct. 1995.

Session Chair, 1994 S.P.I.E. Conf. on ``3-D Computer Vision" in Boston, Oct. 1994.
Co-chair, 1991 S.P.I.E. Conference on ``Curves and Surfaces in Computer Vision and Graphics," in San Diego, CA , Nov. 1991.

National Panels:
Served on grant review panels for the following agencies:

The National Science Foundation, The Department of Defense, The High Performance Computing and Communication (HPCC) initiative, and The National Library of Medicine.

Member of workshops to decide research directions for the following agencies
The National Science Foundation, The National Cancer Society.

Professional Societies:

I.E.E.E. (Institute of Electronic and Electrical Engineers).
M.A.A. (Mathematical Association of America).