

Amir A. Amini is Professor and Endowed Chair in Bioimaging at the University of Louisville where he performs research in the area of biomedical imaging and image analysis. He received the B.S. degree in Electrical Engineering from the University of Massachusetts, Amherst, MA, with high honors when at 18 he was the youngest graduate of the University, and the M.S. and PhD degrees from the University of Michigan, Ann Arbor, MI, in 1984 and 1990 respectively. After postdoctoral work in biomedical imaging (1990-1992), he was at Yale as Assistant Professor (1992-1996). He then moved to Washington University in St. Louis where he was Assistant and then Associate Professor with tenure (1996-2006). He has been at the University of Louisville since August 2006. He is the recipient of the National Institutes of Health FIRST Award in 1998 and University of Louisville Delphi Center for Teaching and Learning for his course on medical imaging. He received the Distinguished Lecturer Award from the IEEE EMBS in 2013, has served since 2013 on the IEEE EMBS Technical Committee on Biomedical Imaging and Image Processing (BIIP), and served on the EMBS Administrative Committee (Ad Com) for the term 2016-2018. He has served on numerous NSF and NIH study sections and has mentored 45 M.S., Ph.D, and postdoctoral advisees throughout his career. He has ~190 publications including a number of books and proceedings, and has five provisional or issued US patents. Dr. Amini is a Fellow of AIMBE and of the IEEE Engineering in Medicine and Biology Society.

Journal Editorial Experience

- Associate Editor, IEEE Journal for Biomedical and Health Informatics, since 2016
- Associate Editor, IEEE Transactions on Biomedical Engineering, since 2014
- Associate Editor, Computerized Medical Imaging and Graphics, since 2012
- Associate Editor, IEEE Transactions on Medical Imaging, since 1999
- Guest Editor (with F. Bookstein and D. Wilson), Computer Vision, Graphics, and Image Processing Special Issue on Biomedical Image Analysis, May 1997
- Guest Editor (with A. Frangi and E. Bullitt), IEEE Transactions on Medical Imaging Special Issue on Vascular Imaging, April 2005
- Acting Associate Editor, Medical Physics, 2005

Conference Organization Experience

- General Co-Chair (with S. Acton), IEEE International Symposium on Biomedical Imaging, Washington, DC, April 2018
- General Co-Chair (with A. Manduca), SPIE Medical Imaging Conference on Physiology, Function, and Structure from Medical Images, 2003-2006
- General Co-Chair (with M. Sonka and E. Krupinski), SPIE Medical Imaging Symposium, San Diego, CA, February 2007
- Theme Co-Chair for Biomedical Imaging, IEEE Engineering in Medicine and Biology Conference, 2012
- Co-Editor (with J. Ji) of Theme 2 (Biomedical Imaging), IEEE Engineering in Medicine and Biology Conference Editorial Board, 2015-2018
- Member of scientific program committee, conference editorial board, area chair, or paper selection committee for 63 conferences and workshops in the area of medical imaging and medical image analysis, 1995-2018

Five Representative Publications

- J. Cha, M. Farhangi, N. Dunlap, and A. Amini, "Segmentation and Tracking of Lung Nodules via Graph-Cuts Incorporating Shape Prior and Motion from 4D CT", *Medical Physics*, vol. 45, no. 1, pp. 297-306, January 2018.
- M. Farhangi, H. Frigui, A. Seow, and A. Amini, "3D Active Contour Segmentation Based on Sparse Linear Combination of Training Shapes (SCoTS)", *IEEE Trans. on Medical Imaging*, Vol. 36, Issue 11, pp. 2239-2249, Nov. 2017.
- I. El-Sayed, A. Hussanein, H. Wang, and A. Amini, "Tagging Analysis Techniques: I", Chapter 15 of *Heart Mechanics: Magnetic Resonance Imaging – Advanced Techniques, Clinical Applications and Future Trends*, I. El-Sayed (Ed.), CRC Press, 2017.
- M. J. Negahdar, M. Kadbi, M. Kendrick, M. Stoddard, A. Amini. "4D spiral imaging of flows in stenotic phantoms and subjects with aortic stenosis." *Magnetic Resonance in Medicine*, 75(3):1018–1029, March 2016.
- V. Tavakoli, N. Bhatia, R. A. Longaker, M. Stoddard, A. Amini. "Tissue Doppler imaging optical flow (TDIOF): a combined B-mode and tissue Doppler approach for cardiac motion estimation in echocardiographic images." *IEEE Transactions on Biomedical Engineering* 61(8):2264-2277, March 2014.