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Education:

- B.E., Electronics Engineering, University of Tokyo, Mar. 1974.
- M.S., Computer Science, University of Kentucky, Dec. 1975.
- Ph.D., Computer Science, Michigan State University, Aug. 1983.

Current Position:

- Professor, Wright State University, since Sept. 2001.

Dr. Goshtasby has been working on various image registration problems since 1982. His dissertation title was “A symbolically-assisted approach to digital image registration,” addressing problems relating to registration of multisensor images. His method for automatic registration of images with rotational differences was selected as the best contributed paper in the *17th International Symposium on Remote Sensing of Environment* in 1983 and won the William Fischer Memorial Award. He has studied various problems in image registration since graduation. He has also studied various transformation functions for nonrigid registration of remote sensing and biomedical images. He has edited a special issue of *Pattern Recognition* on image registration with Jacqueline de Moigne, NASA Goddard, and a special issue of *Computer Vision and Image Understanding* on nonrigid image registration with Colin Studholme, Lawrence Staib, and Demetri Terzopoulos. Goshtasby’s research has been interdisciplinary and for that reason he has been collaborating with researchers in different fields.

Representative Publications on Image Registration

1. A. Goshtasby, “Piecewise Cubic Mapping Functions for Image Registration,” *Pattern Recognition*, vol. 20, no. 5, 1987, pp. 525-533.
2. A. Goshtasby, “Registration of Images with Geometric Distortions,” *IEEE Trans. Geoscience and Remote Sensing*, vol. 26, no. 1, 1988, pp. 60-64.
3. A. Goshtasby, “Image Registration by Local Approximation Methods,” *Image and Vision Computing*, vol. 6, no. 4, 1988, pp. 255-261.

4. M. Jackowski, A. Goshtasby, S. Bines, D. Roseman, C. Yu, "Correcting the Geometry and Color of Digital Images," *IEEE Trans. Pattern Analysis and Machine Intelligence*, vol. 19, no. 10, 1997, pp. 1152-1158.
5. L. Ding, A. Goshtasby, and M. Satter, "Volume image registration by template matching," *Image and Vision Computing*, vol. 19, no. 12, 2001, pp. 821-832.

Other Representative Publications

1. A. Goshtasby and D. A. Turner, "Segmentation of Cardiac Cine MR Images for Extraction of Right and Left Ventricular Chambers," *IEEE Trans. Medical Imaging*, vol. 14, no. 1, 1995, pp. 56-64.
2. Z. Yue, A. Goshtasby, and L. V. Ackerman, "Automatic Detection of Rib Borders in Chest Radiographs," *IEEE Trans. Medical Imaging*, vol. 14, no. 3, 1995, pp. 525-536.
3. A. Goshtasby, S. Nambala, W. deRijk, and S. Campbell, "A System for Digital Construction of Dental Casts," *IEEE Trans. Medical Imaging*, vol. 16, no. 5, 1997, pp. 664-674.
4. A. Goshtasby, "Grouping and parametrizing irregularly spaced points for curve fitting," *ACM Trans. Graphics*, vol. 19, no. 3, 2000, pp. 185-203.
5. M. Jackowski, M. Satter, and A. Goshtasby, "Approximating Digital 3-D Shapes by Rational Gaussian Surfaces," *IEEE Trans. Visualization and Graphics*, vol. 9, no. 1, 2003, pp. 56-69.

Past Collaborators

David Turner, M.D. (Rush-Presbyterian-St. Luke's Medical Center), Sidney Miller, M.D. (Miami-Valley Hospital), Martin Satter, Ph.D. (Kettering Medical Center), Jay Udupa, Ph.D. (University of Pennsylvania, Department of Radiology), Milan Sonka, Ph.D. (University of Iowa, Department of Computer Engineering), Lawrence Staib, Ph.D. (Department of Radiology).

Former Advisors

George Stockman and Carl Page, Michigan State University

Ph.D. Graduates

Zhanjun Yue, Marcel Jackowski, Lijun Ding, and Lyubomir Zagorchev