

## Hamed Sari-Sarraf

### Education

Ph.D.	Electrical Engineering	University of Tennessee, Knoxville	1993
M.S.	Electrical Engineering	University of Tennessee, Knoxville	1986
B.S. (Honors)	Electrical Engineering	University of Tennessee, Knoxville	1984

### Academic experience

Professor, TTU, ECE, Sep '11 – Present  
Fulbright Scholar, Baku State & Qafqaz Universities, Baku, Azerbaijan, Feb '14 – May '14  
Associate Chair for Computer Eng., TTU, ECE, Nov '09 – Dec '11  
Erasmus Mundus Scholar, University of Burgundy, Le Creusot, France, Sep '08 – Dec '08  
Associate Professor, TTU, ECE, Sep '03 – Aug '11  
Assistant Professor, TTU, ECE, Sep '99 – Aug '03  
Adjunct Professor, The University of Tennessee, Knoxville, ECE, 1994 – 2001

### Non-academic experience

R&D Staff Member II, Oak Ridge National Laboratory, Jan '99 – Aug '99  
R&D Staff Member I, Oak Ridge National Laboratory, 1994 – 1999  
Post-Doctoral Associate, Oak Ridge National Laboratory, 1993 – 1994  
Design Engineer, Digital A.V., Knoxville, TN, 1986 – 1987

### Certifications or professional registrations

Licensed Professional Engineer in Texas (89152) – Inactive since Jan. 2015

### Current membership in professional organizations

Senior Member of IEEE since 2002 // Life Member of SPIE  
Member of Tau Beta Pi Honor Society // Member of Eta Kappa Nu Honor Society  
Life Member of Phi Kappa Phi Honor Society

### Honors and awards

Most Influential Faculty Member, Whitacre College of Engineering, TTU, 2016  
Most Influential Faculty Member, Whitacre College of Engineering, TTU, 2012  
Most Influential Faculty Member, Whitacre College of Engineering, TTU, 2011  
Abell-Hanger Faculty Award, TTU, 2010  
Whitacre Engineering Research Award, TTU, 2009

### Service activities

Member, Radiation Safety Committee, TTU, 2000 – Present  
Associate Editor, SPIE Journal of Electronic Imaging, 2002 – 2016  
Member, Computer Engineering Curriculum Subcommittee, TTU, ECE, 2015 – 2018  
Member, Faculty Development Leave Committee, TTU, 2011  
Member-at-large, Graduate Council, TTU, 2009 – 2011  
Mentor, Center for Undergraduate Research, 2009

### Publications (Selected)

1. G. Moallem, A. Pore, A. Gangadhar, H. Sari-Sarraf, and S. Vanapalli, "Detection of live breast cancer cells in brightfield microscopy images containing white blood cells by image analysis and deep learning," *J. of Biomedical Optics*, accepted.
2. A. Kabir, A. Kharel, S. Malla, Z. Kreis, P. Nath, J. Wolfe, M. Hassan, D. Kaur, H. Sari-Sarraf, A. Tiwari, and A. Ray, "Automated detection of apoptotic versus nonapoptotic cell death using label-free computational microscopy," *J. of Biophotonics*, 2021.
3. G. Moallem, D. Pathirage, J. Reznick, J. Gallagher, H. Sari-Sarraf, "An Explainable Deep Vision System for Animal Classification and Detection in Trail-Camera Images with Automatic Post-Deployment Retraining," *Knowledge-Based Systems*, Vol. 216, 2021.
4. N. Dube, B. Bryant, H. Sari-Sarraf, G. Ritchie, "Cotton Boll Distribution and Yield Estimation Using Three-Dimensional Point Cloud Data," *Agronomy Journal*, Vol. 112, No. 6, p. 4976-4989, 2020.
5. N. Dube, B. Bryant, H. Sari-Sarraf, B. Kelly, C. F. Martin, S. Deb, G. Ritchie, "In Situ Cotton Leaf Area Index by Height Using Three-Dimensional Point Clouds," *Agronomy Journal*, Vol. 111, No. 6, p. 2999-3007, 2019.

### **Professional development**

Fullbright Scholar, Baku State & Qafqaz Universities, Baku, Azerbaijan, Feb '14 – May '14  
 Erasmus Mundus Scholar, University of Burgundy, Le Creusot, France, Sep '08 – Dec '08

### **Invited presentations (Selected)**

1. "Machine Vision and its Mathematical Underpinnings," Institute of Mathematics and Mechanics of the Azerbaijan National Academy of Sciences," May 2014
2. "Machine Vision and its Mathematical Underpinnings," Qafqaz University, Baku, Azerbaijan, May 2014
3. "Twenty Years of Machine Vision Research in the Textile Industry," Gujarat Technological University, Ahmedabad, India, April 2014.
4. "Machine Vision and its Application to Fabric Stain Detection," Church & Dwight Co., April 2012.

### **Patents (Selected)**

1. H. Sari-Sarraf, E. F. Hequet, C. N. Turner, H. Y. Chan, and A. Zhu, "Fabric Wrinkle Evaluation," 7,601,978, October 2009.
2. S. S. Gleason and H. Sari-Sarraf, "Method for Non-referential Defect Characterization Using Fractal Encoding and Active Contours," 7,218,772, May 2007.
3. H. Sari-Sarraf, E. F. Hequet, and A. Pai, "Method for Identification of Cotton Contaminants with X-ray Microtomographic Image Analysis," 6,870,897, March 2005.
4. H. Sari-Sarraf and J. S. Goddard, "4-D Characterization of a Sheet-Forming Web," No. 6,553,133, April 2003.