

## PUBLICATIONS AND PRESENTATIONS

### Select Journal and Magazine Articles

1. C. Binkerd and **M. Mehrubeoglu**, "Sustainable Retention Initiatives in Computing Sciences" *Journal of Computer Education and Research*, Dec. 2009 (accepted; paper #090801).
2. **M. Mehrubeoglu**, L. McLauchlan and D. N. Patterson, "Producing Electricity from Sea Waves: A Small-scale Application" *EMO Bilim*, Vol. 9, No. 25, pp. 32-41, Aug. 2009.
3. **M. Mehrubeoglu**, N. Kehtarnavaz, G. Marquez, M. Duvic, L. V. Wang, "Skin Lesion Classification using Oblique-Incidence Diffuse Reflectance Spectroscopic Imaging," *Applied Optics*, Vol. 41, No. 1, pp. 182-192, January 1, 2002.
4. M. J. Rakovic, G. W. Kattawar, **M. Mehrubeoglu**, B. D. Cameron, L. V. Wang, S. Rastegar, and G. L. Cote, "Light Backscattering Polarization Patterns from Turbid Media: Theory and Experiment," *Applied Optics*, Vol. 38, No. 15, pp. 3399-3408, 20 May 1999.
5. **M. Mehrubeoglu**, N. Kehtarnavaz, S. Rastegar, L. V. Wang, "Effect of molecular concentrations in tissue-simulating phantoms on images obtained using diffuse reflectance polarimetry," *Optics Express*, Vol. 3, No. 7, pp. 286-297, September 28, 1998.  
<http://epubs.osa.org/opticsexpress/topbiframe.htm>
6. B. D. Cameron, G. L. Cote, M. Racovic, G. Kattawar, **M. Mehrubeoglu**, S. Rastegar, L. Wang, "Measurement and Calculation of the Two-Dimensional Back-Scattering Mueller Matrix of a Turbid Medium," *Optics Letters*, OSA, Vol. 23, pp. 0485-0487, April 1998.
7. **M. Mehrubeoglu**, G. L. Cote, "Determination of Total Reducing Sugars in Potato Samples Using Near Infrared Spectroscopy," *The Journal of Cereal Foods World*, p. 409, May 1997.

### Select Conference Papers and Presentations

1. **M. Mehrubeoglu** and L. McLauchlan, "Error analysis of filtering operations in pixel-duplicated images of diabetic retinopathy," SPIE Optics and Photonics, San Diego, CA, 1-5 August 2010.
2. L. McLauchlan and **M. Mehrubeoglu**, "Combined DWT and DCT embedded watermarking using Chaos theory," SPIE Optics and Photonics, San Diego, CA, 1-5 August 2010.
3. J. Durham, **M. Mehrubeoglu**, and L. McLauchlan, "Interoperable Open-Source Sensor-Net Frameworks With Sensor-Package Workbench Capabilities: Motivation and Exploratory Results," accepted 15th ICCRTS International Command and Control Research and Technology Symposium, Santa Monica, California, June 22-24, 2010.
4. L. McLauchlan and **M. Mehrubeoglu**, "A Survey of Green Energy Technology and Policy," IEEE Green Technology Conference, Grapevine, TX, pp. 1-6, April 15-16, 2010.
5. **M. Mehrubeoglu**, Diego Rojas, and L. McLauchlan, "Object tracking using multiple camera video streams," *Proc. of SPIE Photonics Europe, Brussels, Belgium, April 12-16, 2010*.
6. J. Durham, **M. Mehrubeoglu**, D. Carter, R. McBee, and L. McLauchlan, "Support for Flight Trajectories and Video Capture: Initial Results Using a Free Open Source Flight Simulator," Earth & Space 2010 Conference – The 12th ASCE Aerospace Division Biennial International Conference on Engineering, Science, Construction and Operations in Challenging Environment, Honolulu, HI, pp. 1941-8, March 14-17, 2010.
7. F. Attarzadeh *et al.* and **M. Mehrubeoglu** "Expanding the Quality of Mentoring Programs for Undergraduate Students - Observations and Challenges", ASEE-Gulf Southwest Conference, Lake Charles, LA, March 24-26, 2010

8. **M. Mehrubeoglu**, F. Attarzadeh, and D. Gurkan, "Comparative Evaluation of Laboratory Teaching in an AC Circuit Analysis Course," *ASEE/IEEE FIE Conference*, pp. M1E1-M1E6 (6 pages), October 18-21, 2009.
9. **M. Mehrubeoglu** and L. McLauchlan, "Analysis of Filtering Techniques and Image Quality in Pixel Duplicated Images," *Mathematics for Signal and Information Processing*. Edited by Schmalz, Mark S.; Ritter, Gerhard X.; Barrera, Junior; Astola, Jaakko T.; Luk, Franklin T., *Proc. of the SPIE, Vol. 7444.*, pp. 744405-1 - 744405-12 (12 pages), 2009.
10. L. McLauchlan and **M. Mehrubeoglu**, "Evidence of tampering in watermark identification," *Mathematics for Signal and Information Processing*. Edited by Schmalz, Mark S.; Ritter, Gerhard X.; Barrera, Junior; Astola, Jaakko T.; Luk, Franklin T., *Proc. of the SPIE, Volume 7444*, pp. 74440D-1 - 74440D-9 (9 pages), 2009.
11. **M. Mehrubeoglu**, "A Lego Robot Project using Concept Maps and Peer-Led Teams for Freshman Engineering and Engineering Technology Courses," *Proc. 2009 ASEE Annual Conference and Exposition, Freshman Programs Division*, Austin, TX, June 14-17, 2009; paper # AC 2009-270 (12 pages).
12. F. Attarzadeh, D. Gurkan, M. Moges, M. Ramos, V. Gallardo, **M. Mehrubeoglu**, and Reddy Talusani, "NSF Grantee Presentation: Results of an Innovative Approach to Learning via Peer-to-peer Undergraduate Mentoring in Engineering Technology Laboratories," *Proc. 2009 ASEE Annual Conference and Exposition, Austin, TX, June 14-17, 2009*, paper # AC 2009-341 (8 pages).
13. F. Attarzadeh, D. Gurkan, M. Ramos, M. Moges, V. Gallardo, **M. Mehrubeoglu**, R. Talusani, and S. Karulkar, "Perception of Undergraduate Freshman Students on Role Models and Correlation with Their Education Background," *Proc. 2009 ASEE Annual Conference and Exposition, Austin, TX, June 14-17, 2009*, paper # AC 2009-344, (15 pages).
14. **M. Mehrubeoglu**, L. McLauchlan, and David Nicholas Patterson, "Generating Current from Ocean Waves", *Proc. IEEE Green Technology Conference, Lubbock, TX, April 16-17, 2009* (8 pages) (to appear in *IEEE Xplore database in 2010*).
15. L. McLauchlan and **M. Mehrubeoglu**, "Multi-Objective Evolutionary Algorithm Based Filters for Image Enhancement," (SPIE Defense, Security, and Sensing Symposium, Orlando, FL, April 13-17, 2009), *Visual Information Processing XVIII*. Edited by Rahman, Zia-Ur; Reichenbach, Stephen E.; Neifeld, Mark A.. *Proc. of the SPIE, Volume 7341*, pp. 73410C1-73410C-8 (8 pages), 2009.
16. **M. Mehrubeoglu** and L. McLauchlan, "Determination of Vehicle Speed in Traffic Video," (IS&T/SPIE Electronic Imaging Conf., San Jose, CA, January 18-22, 2009). *Real Time Image Processing, Proc. SPIE, Vol. 7244*, pp. 72440O-72440O-12 (12 pages), 2009.
17. C. Binkerd and **M. Mehrubeoglu**, "Sustainable Retention Initiatives" presented at Association for Computer Educators in Texas 44<sup>th</sup> Annual Conference, *Digital Education: Beyond the City Limits, Austin, Texas, October 2 – 4, 2008 (abstract only)*.
18. L. McLauchlan and **M. Mehrubeoglu**, "GLCM and neural network based watermark identification," *Proc. SPIE Optics and Photonics Conf., San Diego, CA, August 10-14, 2008*.
19. **M. Mehrubeoglu** and L. McLauchlan, "Adaptive fingerprint enhancement and identification using linear parametric models," *Proc. SPIE Optics and Photonics Conf., San Diego, CA, August 10-14, 2008*.
20. L. McLauchlan and **M. Mehrubeoglu**, "Neural network internal model process control," *Proc. SPIE Defense and Security Conf., Orlando, FL, March 17-20, 2008*.
21. L. McLauchlan and **M. Mehrubeoglu**, "Adaptive model and neural network based identification," *Proc. of SPIE Volume 6700: Mathematics of Data/Image Coding, Compression, and Encryption X, with Applications*, pp. 670009-1 – 670009-11 (11 pages), Sept. 2007.

22. **M. Mehrubeoglu** and L. McLauchlan, "Identification of degraded fingerprints using PCA and ICA-based features," *Proc. of SPIE Volume 6696: Applications of Digital Image Processing XXX*, pp. 66961D-1 – 66961D-10 (10 pages), Sept. 2007.
23. **M. Mehrubeoglu** and L. McLauchlan, "A Cooperative Learning Model In Multi-Disciplines Across Universities In Freshmen Courses," *2007 ASEE Ann. Conf. and Exposition, Honolulu, HI, 24-27 June 2007*
24. **M. Mehrubeoglu** and L. McLauchlan, "Student Perceptions of Effective Teaching in Engineering: A Comparative Study Across Student Groups," *Proc. 2007 ASEE-GSW Conference*, T1B5, South Padre Island, TX, 28-30 March, 2007(available: <http://www.aseegsw.org/>).
25. A. Salem and **M. Mehrubeoglu**, "A Web-Based Remote-User Laboratory Model for Upper Division Laboratory Experiments," *Proc. 2007 ASEE-GSW Conference*, F2C4, South Padre Island, TX, 28-30 March, 2007 (available: <http://www.aseegsw.org/>).
26. **M. Mehrubeoglu** and L. L. McLauchlan, "Determination of Traffic Density from Traffic Images at Day and Night Time," *Proc. SPIE-IS&T Electronic Imaging, SPIE Vol. 6496, 649603-1 – 12 (12 pages), 2007. (IS&T/SPIE 19<sup>th</sup> Annual Symposium on Electronic Imaging, Real-Time Image Processing Conference, 28 January- 1 February 2007)*.
27. L. L. McLauchlan and **M. Mehrubeoglu**, "Use of Adaptive Models in Watermark Identification," *Proc. SPIE 6315, 631508, (SPIE Optics & Photonics Conference, San Diego, CA, 13-17 August, 2006)* 2006. DOI:10.1117/12.681491
28. L. L. McLauchlan and **M. Mehrubeoglu**, "Coordinated Intelligent Adaptive Control of Legged Robots," *Unmanned Systems Technology VIII*. Edited by Gerhart, Grant R.; Shoemaker, Charles M.; Gage, Douglas W.. *Proceedings of the SPIE, Volume 6230, 62302C, 2006. (SPIE Defense and Security Symposium, Orlando, Florida, 17-21 April 2006)*
29. **M. Mehrubeoglu** and L. L. McLauchlan, "Determination of Traffic Intensity from Camera Images using Image Processing and Pattern Recognition Techniques," *Real-Time Image Processing 2006, Proc. of the SPIE, Volume 6063*, pp. 217-228, 2006. *(IS&T/SPIE 18<sup>th</sup> Annual Symposium on Electronic Imaging, San Jose, California, 15-19 January 2006)*
30. L. L. McLauchlan and **M. Mehrubeoglu**, "An Adaptive Watermarking Scheme in the DCT Domain," *Proc. SPIE 5915, 591505 (SPIE Optics & Photonics Conference, San Diego, California, 31 July – 4 August, 2005)*, 2005. DOI:10.1117/12.618077
31. **M. Mehrubeoglu** and L. L. McLauchlan, "Students' Perceptions of Effective Teaching Methods," *2<sup>nd</sup> Annual Conference on Scholarship of Teaching and Learning, TAMUK, Kingsville, Texas, 22 April 2005*.
32. **M. Mehrubeoglu** and L. L. McLauchlan, "Effective Teaching Strategies for Non-Native English Speakers in English Curricula," *International Congress on Higher Education, Perspectives on University Education in the 21<sup>st</sup> Century, Istanbul, Turkey, 27-29 May, 2004*.
33. Garcia-Uribe, A., Kehtarnavaz, N., Marquez, G., **Mehrubeoglu, M.**, Prieto, V. and Duvic, M., "Skin cancer detection using spectroscopic oblique-incidence reflectometry," [Engineering in Medicine and Biology, 2002. 24th Annual Conference and the Annual Fall Meeting of the Biomedical Engineering Society] *Proceedings of the Second Joint EMBS/BMES Conference, 2002*, Volume 3, Issue , 23-26 Oct. 2002, pp. 2249 – 2250.
34. A. Garcia-Uribe, N. Kehtarnavaz, G. Marquez, **M. Mehrubeoglu**, V. Prieto, M. Duvic and L.-H. Wang, "Classification of skin abnormalities using oblique-incidence diffuse reflectance spectroscopy," pp. 414-416, *Biomedical Optical Spectroscopy, Imaging and Diagnostics*, Optical Society of America, Miami Beach, Florida, April 7-10, 2002.
35. **M. Mehrubeoglu**, N. Kehtarnavaz, G. Marquez, and L. Wang, "Characterization of skin lesion texture in diffuse reflectance spectroscopic images," *Proc. of the IEEE SSIAI Symposium*, pp 146-150, Austin, April 2000.