

Ruby Mehrubeoglu Ph.D.

Texas A&M University-Corpus Christi
Science & Engineering, Engineering

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Education

PhD, Texas A&M University, 2000.

MS, Texas A&M University, 1995.

BS, The University of Texas at Austin, 1993.

Licensures and Certifications

Certificate of Professional Development in Best Practices for Online Course Design, Office of Distance Education and Learning Technologies, Texas A&M University-Corpus Christi. (2016 - Present).

Laser Safety Officer, Laser Institute of America. (2015 - Present).

Certificate in Management in Science and Technology (21 credit hours (6 courses) of graduate work), Oregon Graduate Institute - Oregon Health and Science University, Beaverton, OR. (2006 - Present).

First Tech Challenge (FTC) Robot Inspector Certification, FTC. (2016).

Lead Software Inspector for the 2014-2015 Season of the FIRST Tech Challenge, First Tech Challenge. (2015).

Lead Software Inspector for the 2012-2013 Season of the FIRST Tech Challenge game, Block Party, First Tech Challenge. (2013 - 2014).

Lead Software Inspector for the 2012-2013 Season of the FIRST Tech Challenge game, Ring It Up!, FIRST Tech Challenge. (2013).

Professional Employment

Program Coordinator, Associate Professor, Mechanical Engineering, Electrical Engineering, and Engineering Technology, Texas A&M University-Corpus Christi. (September 2015 - Present).

1. Review and enter course listing for each program each semester
2. Support department chair in course and faculty loading
3. Review transfer student transcripts for admission into mechanical engineering programs
4. Review, update and sign letters of admission for each applicant for mechanical engineering and electrical engineering programs
5. Address student and parent grievances
6. Other duties as assigned by Department Chair or Director of School of ENCS

Associate Professor, Mechanical Engineering, Texas A&M University-Corpus Christi. (September 2011 - Present).

Professional Services Provider, Surface Optics Corp. (July 2015 - August 2015).

Provided vision solutions using the company's imaging systems

ONR Summer Faculty Research Fellow, SPAWAR Systems Center-Pacific. (May 2013 - July 2013).

Visiting Research Fellow, Barts and The London, Queen Mary, University of London. (2012).

Summer Fellowship through Collaborative Research Travel Grant, Burroughs Wellcome Fund

Program Coordinator, Assistant Professor, Mechanical Engineering and Engineering Technology, Texas A&M University-Corpus Christi. (January 2010 - September 2011).

Teaching, research, service, administrative

Assistant Professor, Engineering Technology, Texas A&M University-Corpus Christi. (2007 - 2009).

Teaching, research, service

Visiting Assistant Professor, Engineering Technology, Texas A&M University-Corpus Christi. (2005 - 2007).

Teaching and service

Chair, Assistant Professor, Department of Computer Engineering, Cyprus International University. (2002 - 2004).

Postdoctoral Research Engineer/Software Engineer, Electro Scientific Industries, Inc. (2000 - 2002).

R&D

Lecturer, Department of Engineering Technology and Industrial Distribution, Texas A&M University. (1998 - 1999).

Teaching

Assistant Lecturer, Texas A&M University. (1997 - 1998).

Teaching

Administrative Appointments

Department

Program Coordinator (2015 - 2017)

- 1) Review transfer student transcripts
- 2) Review and enter courses into the system for student enrollment
- 3) Review new student candidates for Mechanical Engineering and Electrical Engineering Programs
- 4) Compose letters for each applicant (admission and other)
- 5) Trouble-shoot student issues on a case-by-case basis
- 6) Complete an 8-semester plan for Electrical Engineering Program
- 7) Lead efforts for lab equipment and materials for Electrical Engineering Program
- 8) Participate in Recruitment and Retention Efforts
- 9) Represent the Engineering and Engineering Technology Programs on internal and external venues as requested
- 10) Perform faculty advising to all students who have missed the 2-week period to be advised by their assigned faculty mentor

Program Coordinator (2010 - 2011)

Mechanical Engineering and Engineering Technology Program

- 1) Assisted with the Weave report for Mechanical Engineering, Mechanical Engineering Technology, and Electrical Engineering Technology
- 2) Organized IAB meeting (May 6, 2011); prepared IAB member packages with forms and capstone projects information
- 3) Prepared and gave a PowerPoint presentation to the Industry Advisory Board members on program ME, MET and EET program updates; assessment, and efforts on closing the loop, for their feedback as part of the program improvement process

- 4) Prepared the first draft of the ABET report for EET and MET programs
- 5) Organized and led engineering and technology program meetings to discuss and analyze course and program activities to close the loop
- 6) Organized and led ABET meetings for the ABET interim report for MET and EET
- 7) Trained the ABET Coordinator on ABET, SACS and WEAVE reports and related activities through weekly meetings
- 8) Continued Student Faculty Advising: Advised Electrical Engineering Technology (EET), Mechanical Engineering Technology (MET) and Mechanical Engineering (MEEN) and Pre-engineering (PREM) students regarding their course selection and academic plans during the dedicated student advising period (this has contributed to increased credit hours for the ET program)
- 9) Led EET and MET curriculum review to close the loop
- 10) Helped with combining individual ClassAct course files to obtain program outcomes assessment charts
- 11) Prepared course catalog change forms
- 12) Prepared course fee change forms
- 13) Responded to student and parent inquiries about the program
- 14) Prepared, submitted and defended (3/7/11) a proposal to the University Curriculum Committee for a specialized Chemistry-based Learning Community/TRIAD for engineering students (the idea was to replace history course with chemistry to better prepare students for technical courses)
- 15) Promoted a pilot program for math courses specifically geared for science and engineering students (STEP program)
- 16) Prepared course schedules (Spring, Summer, Fall 2011)
- 17) Worked closely with math, physics and TRIAD programs to minimize overlap of required science courses with engineering and technology courses when scheduling classes.
- 18) Contributed to Del Mar - TAMUCC articulation agreement for engineering; participated in the signing of the Articulation Agreement media-covered event on January 18, 2011
- 19) Reviewed transcripts for transfer students
- 20) Completed Faculty credentialing report
- 21) Determined course offerings and faculty course assignments
- 22) Prepared Faculty Course Load reports
- 23) Interviewed/identified TAs, graders and tutors
- 24) Interviewed TAs for TA assignments

Professional Memberships

Institute of Electrical and Electronics Engineers (IEEE, Senior Member)
 The Society of Photo-Optical Instrumentation Engineers (SPIE, Life Member)
 Sigma Xi
 Optical Society of America
 American Society for Engineering Education (ASEE)
 IEEE Corpus Christi Section
 Society of Manufacturing Engineers (SME)

TEACHING

Teaching Experience

COSC 5999, ADV RESEARCH IN COMPUTER SCI
 EEEN 3320, INTRO TO COMM THEORY & SYSTEMS
 EEEN 4333, MACHINE VIS IMAGE PROCESS APPL
 ENGR 1211, FOUNDATION OF ENGINEERING
 ENGR 2360, CIRCUIT ANALYSIS
 ENGR 2460, CIRCUIT ANALYSIS

ENGR 4350, Machine Vision and Image Processing Applications
ENTC 1303, INTRO TO ENGINEERING TECH
ENTC 2414, CIRCUIT ANALYSIS I
ENTC 2490, Selected Topics: Optical Instrumentation, Optical Properties and System Calibration
ENTC 3415, CIRCUIT ANALYSIS II
ENTC 3418, MICROPROCESSORS-MICROCONTROLR
ENTC 4350, CAPSTONE PROJECTS
ENTC 4415, PROJECT JUSTIFICATION AND MGMT
ENTC 4490, SELECTED TOPICS: Human Performance for Nuclear Power Plant Engineering
ENTC 4496, DIS: Development of a Software Controlled Autofocus Capability for an Optio System
ENTC 5490, Selected Topics: Digital Imaging Processing with MATLAB
ENTC 5496, DIS: Hyperspectral Imaging and Data Mining Using Mud Samples
HONR 4195, PROJECT OF EXCELLENCE
HONR 4396, HONORS DIRECTED IND STUDY: Modeling Optical Properties from Real-Time Data
HONR 4398, HONORS APPLIED EXPERIENCE
MEEN 4340, PROJECT MANAGEMENT
MEEN 4345, SENSORS AND SYSTEMS
MEEN 4370, CAPSTONE PROJECTS
MEEN 4396, DIS: Developing Customized Swimming Goggles from 3D Facial Scan

Non-Credit Instruction

MEEN 4396-4, DIS: Fundamentals of Sensors and Signals, TAMUCC, Department of Engineering. (October 2015 - December 2015).
PROJECT OF EXCELLENCE - 42815 - HONR 4195 - 005, School of Engineering and Computing Sciences. (January 2015 - May 2015).
Capstone Project Supervision/Mentoring. (September 2012 - May 2014).
ENTC 5490 Selected Topics: Digital Imaging Processing with MATLAB. (August 2013 - December 2013).
HOPI Equipment Training, and Research Project Mentoring. (2013).
FE Exam Review, School of Engineering and Computing Sciences. (2013).
ENTC 5496 001 - Hyperspectral Imaging and Data Mining Using Mud Samples. (January 2013 - May 2013).
ENTC 4496 - Digital Logic. (2007).

Teaching Awards and Honors

Plaque in Recognition of Nomination for the US Professors of the Year Award, Carnegie Foundation for the Advancement of Teaching and Council for Advancement and Support of Education. (2016).
Spring 2015 Communities of Practice Fellow, "Making an Engineering Technical Elective More Hip through HIPs: High-Impact Practices for 'Sensors and Systems' ", Center for Faculty Excellence, TAMUCC. (2015).
Challenging-Based Instruction (CBI) Fellow, University of Texas at Pan American, National Science Foundation. (2015).
May 2015 Communities of Practice Fellow, "Improving Learning through Technical Writing: Redesigning Technical Writing Assignments and Rubrics for Engineering Project Management Course", Center for Faculty Excellence, TAMUCC. (2015).
CASE Professor Award Nominee, Texas A&M University-Corpus Christi. (2015).
Undergraduate Research Cording Ceremony, Co-Mentor for Hugo Mahlke, College of Science and Technology. (2011).

SCHOLARLY AND CREATIVE ACTIVITIES

Publications

Refereed

Conference Proceedings

Mehrubeoglu, R., Nicula, C., Trombley, C., Smith, S. W., Smith, D. K., Shanks, S. E., Zimba, P. V. (2015). In Thomas S. Pagano and John F. Silny (Ed.), *Mapping pigment distribution in mud samples through hyperspectral imaging* (vol. Vol. 9611, Imaging Spectrometry XX, pp. 1-12). California: SPIE.

Mehrubeoglu, R., Simionescu, P.-A., Robinson, S., McLauchlan, L. (2015). In Thomas S. Pagano and John F. Silny (Ed.), *A comparative study of three vision systems for metal surface defect detection* (Imaging Spectrometry XX, 96110L ed., vol. SPIE Vol 9611, pp. 96110L-1 - 9611-L-11). California: SPIE. [dx.doi.org/10.1117/12.2190216](https://doi.org/10.1117/12.2190216)

Mehrubeoglu, R., Zemlan, M., Henry, S. (2015). In Thomas S. Pagano and John F. Silny (Ed.), *Hyperspectral imaging for differentiation of foreign materials from pinto beans* (96110A ed., vol. Vol. 9611, Imaging Spectrometry XX, pp. 1-8). California: SPIE.

Mehrubeoglu, R., McLauchlan, L., Karayaka, H. Bora (2014). Ocean Energy Conversion and Storage - Prototypes for Wave, Current and Tide Energy Generators. *2014 6th Annual IEEE Green Technologies Conference, Corpus Christi, Texas, 3-4 April 2014*. Piscataway, New Jersey: IEEE. ieeexplore.org

Mehrubeoglu, R., Buck, G. W., Livingston, D. W. (2014). Differentiation of bacterial colonies and temporal growth patterns using hyperspectral imaging. In Pantazis Mouroulis and Thomas S Pagano (Ed.), *Imaging Spectrometry* (922206th ed., vol. 9222, pp. 1-15). San Diego CA: SPIE.

McLauchlan, L., Mehrubeoglu, R. (2014). A Laboratory Exercise - Unmanned Vehicle Control and Wireless Sensor Networks. *121st ASEE Annual Conference and Exhibition, Indianapolis, IN, 15-18 June 2014*. American Society for Engineering Education (ASEE). www.asee.org/public/conferences/32/papers/10174/view

Durham, J., Zeller-Townson, R., McLauchlan, L., Mehrubeoglu, R., Cardenas, R., Dejesus, F., McDonnell, J. (2014). Network-Centric Operations Support: Lessons Learned, Status and Way-Ahead. *19th International Command and Control Research and technology Symposium (ICCRTS 2014), Alexandria, VA, 16-19 June 2014*. Command and Control Research Program. dodccrp.org/events/19th_iccrts_2014/track_chair/papers/055.pdf

Mehrubeoglu, R., McLauchlan, L., Zimba, P. V., Teng, M. Y. (2013). Spectral Unmixing of Three-Algae Mixtures Using Hyperspectral Images. *2013 IEEE Sensors Applications Symposium, Galveston, TX, February 19-21, 2013* (pp. 6 pages). Piscataway, NJ: IEEE.

Karayaka, H. B., Mehrubeoglu, R. (2013). Nuclear Workforce Development Scholarships and Enhancements Program Phase I: Outreach and Recruiting (THIRD PLACE BEST PAPER AWARD WINNER IN ENERGY CONSERVATION AND CONVERSION DIVISION (ECCD)). *120th ASEE Annual Conference and Exposition, Atlanta, GA, June 23-28, 2013*. (pp. 14 pages). ASEE.

McLauchlan, L., Mehrubeoglu, R., Durham, J. (2013). Problem Based Learning Through Modeling and Simulation of Unmanned Vehicles. *120th ASEE Annual Conference and Exposition, Atlanta, GA, June 23-28, 2013* (pp. 10 pages). ASEE.

Mehrubeoglu, R., Teng, M. Y., Savage, M., Rafalski, A., Zimba, P. V. (2012). Hyperspectral Imaging and Analysis of Mixed Algae Species in Liquid Media. *2012 IEEE International Conference on Imaging Systems and Techniques, Manchester, UK, July 16-17, 2012* (pp. 421-424). Piscataway, New Jersey: IEEE.

Mehrubeoglu, R. (2012). Spectral Characterization of a Hyperspectral Imaging System using Optical Standards. *2012 IEEE International Conference on Imaging Systems and Techniques, Manchester, UK, July 16-17, 2012* (pp. 126-129). Piscataway, New Jersey: IEEE.

Mehrubeoglu, R., Pham, L. M., Le, H. T., Muddu, R., Ryu, D. (2011). *Real-Time Eye Tracking Using a Smart Camera* (pp. 1-7). IEEE Applied Imagery Pattern Recognition Workshop. ieeexplore.ieee.org

Mehrubeoglu, R., Pham, L., Paleti, N. (2011). *Real-time Web-based Hyperspectral Data Viewing and Control*. Washington, D.C.: AIPR Workshop Proceedings, October 11-13, 2011.

Mehrubeoglu, R., McLauchlan, L. (2011). In Mark S. Schmalz, Gerhard X. Ritter, Junior Barrera, and Jaakko T. Astola (Ed.), *Multidimensional feature extraction from 3D hyperspectral images* (vol. 8136, pp. 8136D, pp. 1-9). SPIE, Mathematics of Data/Image Pattern Coding, Compression, and Encryption with Applications XIII (Proceedings Volume).

McLauchlan, L., Mehrubeoglu, R. (2011). Fractal-based watermarking of color images. In Mark S. Schmalz, Gerhard X. Ritter, Junior Barrera and Jaakko T. Astola (Ed.), *Mathematics of Data/Image Pattern Coding, Compression, and Encryption with Applications XIII* (vol. 8136, pp. 813605,). SPIE. [dx.doi.org/10.1117/12.899891](https://doi.org/10.1117/12.899891)

Karayaka, H., Mahlke, H., Bogucki, D., Mehrubeoglu, R. (2011). *A Rotational Wave Energy Conversion System Development and Validation with Real Ocean Wave Data* (pp. 7). Detroit, Michigan: IEEE Power Engineering Society 2011 General Meeting, ieeexplore.ieee.org

Attarzadeh, F., Gurkan, D., Moges, M. A., Gallardo, V. J., Mehrubeoglu, R., Sameei, M. (2011). *Mentor Training Program for a Peer-to-Peer Learning Environment: Leadership vs. Curriculum Balance* (pp. 1-8). Proc. 118th ASEE Annual Conference and Exhibition.

Attarzadeh, F., Gurkan, D., Moges, M. A., Ramos, M. A., Gallardo, V. J., Mehrubeoglu, R. (2011). *NSF Grantee Presentation: Challenges of Implementing a Peer Mentoring Program to Support STEM Learning* (pp. 1-9). 118th ASEE Annual Conference and Exhibition.

Mehrubeoglu, R., Verma, S. (2011). *Software-Based Assessment Method of Student Learning Outcomes and Program Outcomes* (pp. 1-11, AC 2011-2808). Proceedings of ASEE Annual Conference and Exhibition.

Karayaka, H., Yildiz, F., Mehrubeoglu, R., Caruso, K. (2011). *A Nuclear Power Industry Career Development Workshop for High School Teachers in a Hispanic Serving Institution* (pp. 13). Vancouver, BC: ASEE Annual Conference 2011. www.asee.org

Simionescu, P.-A., Mehrubeoglu, R., Caruso, K., Reuter, G. R. (2011). *A Metal Casting Laboratory Exercise - Collaboration Between the Engineering and Art Department at Texas A&M University Corpus Christi*. Vancouver BC: ASEE Annual Conference. www.asee.org/conferences-and-events/conferences/annual-conference/2011

Karayaka, H., Mahlke, H., Mehrubeoglu, R. (2011). *The Development of a Rotational Wave Energy Conversion System: Design and Simulations* (pp. 6). Baton Rouge, LA: IEEE Green Technology Conference 2011. ieeexplore.ieee.org

McLauchlan, L., Mehrubeoglu, R. (2011). *Process Control Model PID Controllers Tuned by Multi-objective Evolutionary Adaptive Algorithms* (vol. II, pp. 62-67 (Session's Best Paper Award)). Proc. 2nd International Multi-Conference on Complexity, Informatics, and Cybernetics: IMCIC 2011, The Spring 9th International Conference on Computing, Communications and Control Technologies: OCCT 2011.

Karayaka, H., Mehrubeoglu, R., Fernandez, J. D. (2011). *A Multidisciplinary Approach to Teaching "Energy Conversion" Course* (pp. 11). Houston, TX: ASEE-GSW Annual Conference 2011. www.tech.uh.edu/aseegsw2011/documents/asee-gsw-2011-conference-technical-program.pdf

McLauchlan, L., Mehrubeoglu, R. (2010). *Combined DWT and DCT Embedded Watermarking using Chaos Theory* (vol. 7799, pp. 7799-21, pp. 1-11). SPIE Optics and Photonics.

Mehrubeoglu, R., McLauchlan, L. (2010). In Mark S. Schmalz; Gerhard X. Ritter; Junior Barrera; Jaakko T. Astola (Ed.), *Error analysis of filtering operations in pixel-duplicated images of diabetic retinopathy* (779901 ed., vol. 7799, pp. 1-11). SPIE, Mathematics of Data/Image Coding, Compression and Encryption with Applications XII.

Durham, J., Mehrubeoglu, R., McLauchlan, L. (2010). *Interoperable Open-Source Sensor-Net Frameworks With Sensor-Package Workbench Capabilities: Motivation and Exploratory Results* (pp. 1-7). 15th ICCRTS International Command and Control Research and Technology Symposium. www.stormingmedia.us/21/2135/A213525.html

McLauchlan, L., Mehrubeoglu, R. (2010). *A Survey of Green Energy Technology and Policy*. IEEE Green Technologies Conference.

Mehrubeoglu, R. (2009). *A Lego Robot Project using Concept Maps and Peer-Led Teams for Freshman Engineering and Engineering Technology Courses* (pp. 1-12). ASEE Annual Conference and Exposition, Freshman Programs Division.

Mehrubeoglu, R., Attarzadeh, F., Gurkan, D. (2009). *Comparative Evaluation of Laboratory Teaching in an AC Circuit Analysis Course* (pp. M1E1-M1E6). ASEE/IEEE FIE.

Mehrubeoglu, R., McLauchlan, L. (2009). *Determination of Vehicle Speed in Traffic Video* (vol. 7244, pp. 1-12). IS&T/SPIE Electronic Imaging, Real Time Image Processing.

McLauchlan, L., Mehrubeoglu, R. (2009). In M. Schmalz, G. X. Ritter, J. Barrera, J. T. Astola, F. T. Luk (Ed.), *Evidence of Tampering in Watermark Identification* (vol. 7444, pp. 744405D - 1-12). SPIE.

McLauchlan, L., Mehrubeoglu, R. (2009). In Zia-Ur Rahman, Stephen E. Reichenbach and Mark A. Neifeld (Ed.), *Multi-Objective Evolutionary Algorithm Based Filters for Image Enhancement* (vol. 7341, pp. 1-8). SPIE Defense, Security, and Sensing Symposium, Visual Information Processing XVIII.

Mehrubeoglu, R., McLauchlan, L. (2009). In Schmalz, Mark S.; Ritter, Gerhard X.; Barrera, Junior; Astola, Jaakko T.; Luk, Franklin T. (Ed.), *Analysis of Filtering Techniques and Image Quality in Pixel-Duplicated Images* (744405th ed., vol. 7444, pp. 1-9). San Diego, California: SPIE, Mathematics for Signal and Information Processing Conference.

Attarzadeh, F., Gurkan, D., Ramos, M., Moges, M., Gallardo, V., Mehrubeoglu, R., Talusani, R., Karulkar, S. (2009). *Perception of Undergraduate Freshman Students on Role Models*

and Correlation with Their Education Background (pp. 1-15). Austin, Texas: ASEE Annual Conference and Exposition.

Attarzadeh, F., Gurkan, D., Moges, M., Ramos, M., Gallardo, V., Mehrubeoglu, R., Talusani, R. (2009). *NSF Grantee Presentation: Results of an Innovative Approach to Learning via Peer-to-peer undergraduate Mentoring in Engineering Technology Laboratories*. ASEE Annual Conference and Exposition.

McLauchlan, L., Mehrubeoglu, R. (2008). *GLCM and Neural Network based Watermark Identification*. SPIE Optics and Photonics Conference.

Journal Articles

Sevinc, O., Huang, L., Mehrubeoglu, R., Li, L., Kilic, E. (2015). Geospatial Information Retrieval based on Query Expansion and Semantic Indexing. *Journal of Engineering and Fundamentals*, 2(2), 51-68.

Mehrubeoglu, R., Teng, M. Y., Zimba, P. V. (2014). Resolving Mixed Algal Species in Hyperspectral Images. *Sensors*, 14(1), 1-21. <http://www.mdpi.com/1424-8220/14/1/1>

Guo, H., Mehrubeoglu, R. (2012). Analysis of Solar Panel Efficiency Through Computation and Simulation. *International Journal of Modern Engineering*, 12(2), 51-58. <http://www.scribd.com/doc/113161994/IJME-Spring-2012-v12-n2-PDW-2>

Simionescu, P.-A., Mehrubeoglu, R. (2012). New Concepts on Two Dimensional Data Visualization with Applications in Engineering Analysis and Design. *Journal of Computing and Information Science in Engineering*, 12(2), 10.

Simionescu, P.-A., Mehrubeoglu, R. (2012). New Concepts on 2D Data Visualization with Applications in Engineering Analysis and Design. *ASME Journal of Computing and Information Science in Engineering*, 12(2), 10. scitation.aip.org/ASMEJournals/JCISE/

Ngo, H., Mehrubeoglu, R. (2010). Effect of the number of LPC coefficients on the quality of synthesized sounds. *International Journal of Engineering Research and Innovation*(Fall 2010), 1-6.

Carol, B., Mehrubeoglu, R. (2010). Sustainable Peer-Led Teaching Activities in Computing Sciences. *ACET Journal of Computer Education and Research*.

Mehrubeoglu, R., McLauchlan, L., Patterson, D. N. (2009). "Producing Electricity from Sea Waves: A Small-scale Application" (published in foreign language). *EMO Bilim*, 9(25), pp. 32-41. http://www.ktemo.org/index.php?option=com_docman&task=cat_view&gid=59&dir=DESC&order=date&limit=5&limitstart=5

Conference Proceeding (published on Conference Memory Stick Only)

Mehrubeoglu, R., McLauchlan, L., Patterson, D. N. (2009). *Generating Current from Ocean Waves* (pp. 1-8). IEEE Green Technology Conference.

Non-Refereed

Conference Proceedings

Mehrubeoglu, R., Buck, G. W., Livingston, D. W. (2014). In Pantazis Mouroulis and Thomas S. Pagano (Ed.), *Differentiation of Bacterial Colonies and Temporal Growth Patterns using Hyperspectral Imaging* (Imaging Spectrometry XIX ed., vol. Proc. SPIE 9222, pp. 15 pages (Paper #: 922206)). SPIE Optics+Photonics Conference, 17-21 August 2014. proceedings.spiedigitallibrary.org/proceeding.aspx?articleid=1909901

Mehrubeoglu, R., Smith, D. K., Smith, S. W., Strychar, K. B., McLauchlan, L. (2013). Investigating coral hyperspectral properties across coral species and coral state using hyperspectral imaging. In Pantazis Mouroulis, Thomas S. Pagano (Ed.), *Proc. SPIE 8870, Imaging Spectrometry VIII, 88700M* (vol. 8870, pp. 88700M, pp. 1-21). SPIE. dx.doi.org/10.1117/12.2027337

Mehrubeoglu, R., Smith, D. K., Smith, S. W., Smee, D. L., Smionescu, P.-A. (2013). Investigating oyster shell thickness and strength using three imaging modalities: hyperspectral imaging, thermal imaging and digital photography. In Pantazis Mouroulis, Thomas S. Pagano (Ed.), *Proc. SPIE Vol. 8870, Imaging Spectrometry VIII, 88700O* (vol. 8870, pp. 88700O-1 - 88700O-20 (20 pages)). SPIE. dx.doi.org/10.1117/12.2027336

Mehrubeoglu, R., Ortlieb, E., McLauchlan, L., Pham, L. (2012). *Capturing Reading Patterns through a Real-time Smart Camera Iris Tracking System* (vol. 8437, Real-Time Image and Video Processing, pp. 11 pages). SPIE.

Durham, J., Mehrubeoglu, R., McLauchlan, L. (2010). *Support for Flight Trajectories and Video Capture: Initial Results Using a Free Open Source Flight Simulator* (pp. 1-8). Earth & Space 2010 Conference – The 12th ASCE Aerospace Division Biennial International Conference on Engineering, Science, Construction and Operations in Challenging Environments.

Book Reviews

Mehrubeoglu, R. (2014). 51-3270 T56 2012-37674 CIP Morris, Peter W. G. *Reconstructing project management*. Wiley-Blackwell, 2013. 319p bibl index afp ISBN 9780470659076. In Georgia Scura (Ed.), *in Choice Magazine*. Middletown, CT: CHOICE.

Mehrubeoglu, R. (2013). In Georgia Scura (Ed.), *Book Review: An interdisciplinary introduction to image processing: pixels, numbers, and programs, book by Tanimoto, Steven L. Tanimoto, MIT Press, 2012* (pp. 1). Middletown, CT: Choice Magazine.

Presentations

Flores, L. (Presenter), Simionescu, P.-A., Mehrubeoglu, R., "Comparison of Temporal Heat Gradients in Thermal Images of Galvanized Parts for Detecting Potential Surface Defects," 2017 TAMUS LSAMP Symposium, TAMUS/LSAMP/NSF, Prairie View A&M University. (March 4, 2017).

smith, s., nicula, c., Zimba, P. V., Mehrubeoglu, R., "comparison of two hyperspectral imaging system results," tamu pathways conference, prairie view. (2016).

Smith, S. (Author), LaField, J. (Author), Nguyen, V. (Author & Presenter), Mehrubeoglu, R. (Author), "CHARACTERIZING A SUPERCONTINUUM LASER AS A LIGHT SOURCE USING A HYPERSPECTRAL IMAGING SYSTEM," 6th Annual MSGSO Research Forum, Marine Science Graduate Student Organization, HRI, TAMUCC. (December 2, 2016).

Smith, S. (Author), LaField, J. (Author & Presenter), Simionescu, P.-A. (Author), McLauchlan, L. (Author), Mehrubeoglu, R. (Author), "CHARACTERIZING A SUPERCONTINUUM LASER AS

A LIGHT SOURCE USING A HYPERSPECTRAL IMAGING SYSTEM," 6th Annual MSGSO Research Forum, Marine Science Graduate Student Organization, HRI, TAMUCC. (December 2, 2016).

Smith, S. (Author), Smith, S. (Author & Presenter), Nicula, C. (Author), Zimba, P. V. (Author), Mehrubeoglu, R. (Author), "Comparison of Two Hyperspectral Imaging System Results," 6th Annual MSGSO Research Forum, Marine Science Graduate Student Organization, HRI, TAMUCC. (December 2, 2016).

Guevara, S. (Author & Presenter), Mehrubeoglu, R. (Author), "Real-Time Optical Property Measurements with Double Integrating Spheres System (DISS)," 6th Annual MSGSO Research Forum, Marine Science Graduate Student Organization, HRI, TAMUCC. (December 2, 2016).

Smith, S. W. (Author & Presenter), Lafield, J. (Author), Nguyen, V. (Author), Mehrubeoglu, R. (Chair), "CHARACTERIZING A SUPERCONTINUUM LASER AS A LIGHT SOURCE USING A HYPERSPECTRAL IMAGING SYSTEM," 13th Annual Pathways Student Research Symposium, TAMUS, Prairie View A&M University, Prairie View, TX. (November 4, 2016).

Smith, S. W. (Author & Presenter), Nicula, C. (Author), Zimba, P. V. (Author), Mehrubeoglu, R. (Chair), "Comparison of Two Hyperspectral Imaging System Results," 13th Annual Pathways Student Research Symposium, TAMUS, Prairie View A&M University, Prairie View, TX. (November 4, 2016).

Smith, S. W. (Author & Presenter), Lafield, J. (Author), Simionescu, P.-A. (Author), McLauchlan, L. (Author), Mehrubeoglu, R. (Author), "Correlating Hyperspectral Images with Thermal Maps for Inspection of Galvanized Steel Parts," 13th Annual Pathways Student Research Symposium, TAMUS, Prairie View A&M University, Prairie View, TX. (November 4, 2016).

Mehrubeoglu, R., Smith, S. W., Nguyen, V., La Field, J., "Characterization and Integration of Supercontinuum Laser with Hyperspectral Imaging System," 2016 SPIE Optics+Photonics, Imaging Spectrometry XXI Conference, SPIE, San Diego, California. (August 29, 2016).

Cammarata, K. (Author & Presenter), Roberson, W. (Author), Cuvelier, A. (Author), Mehrubeoglu, R. (Author), Simons, J. (Author), Shanks, S. (Author), Zimba, P. (Author), Chilton, V. (Author), Fisher, M. (Author), Kavandi, A. (Author), Hare, S. (Author), "Characterization of epiphyte accumulation on seagrasses as an indicator of community change," Society of Wetland Scientists 2016 Annual Meeting, Society of Wetland Scientists, Corpus Christi, TX. (June 6, 2016).

Mehrubeoglu, R., Smith, S. W., Simionescu, P.A., McLauchlan, L., "Comparison of Thermal and Hyperspectral Data to Correlate Heat Maps with Spectral Profiles from Galvanized Steel Surfaces," 2016 IEEE International Conference on Wireless Information Technology and Systems (ICWITS) and Applied Computational Electromagnetics (ACES), IEEE and ACES, Honolulu, HI. (March 16, 2016).

Mehrubeoglu, R., "Imaging Solutions for Assessment and Monitoring for Biology, Environmental Sciences, and Engineering: Hyperspectral Imaging, Thermal Imaging and Digital Photography in the HOPI Lab," TAMUCC-UTEP Collaboration Initiative, Face-to-face Meeting, TAMUCC, Houston, TX. (February 5, 2016).

Smith, S. W. (Author & Presenter), Smith, D. K. (Author), Shanks, S. E., Nicula, C. (Author), Trombley, C. (Author), Zimba, P. (Author), Mehrubeoglu, R. (Chair), "Mapping Pigment Distribution in Mud Samples through Hyperspectral Imaging (2nd Place Winner, Undergraduate Poster)," 5th Annual MSGSO Student Research Forum, Marine Science Graduate Student Organization, Texas A&M University-Corpus Christi, TAMUCC, Corpus Christi, TX. (December 2, 2015).

Idowu, O., Vo, P., Smith, S., Buck, G., Mehrubeoglu, R., "Temporal Analysis of Colonial Morphology of Bacteria Normally Found within Environmental Samples using Hyperspectral Imaging," 5th Annual MSGSO Student Research Forum, Marine Science Graduate Student Organization, Texas A&M University-Corpus Christi, Corpus Christi, Texas. (December 2, 2015).

Idowu, O. F. (Author & Presenter), Vo, P. (Author), Smith, S. (Author), Buck, G. W. (Author), Mehrubeoglu, R. (Author), "Use of hyperspectral imaging to compare colonial morphology of bacteria normally found within environmental samples.," 12th Annual Pathways Student Research Symposium, Texas A&M University System, Texas A&M University-Corpus Christi. (October 23, 2015).

Aerramsetty, S. (Presenter), Mehrubeoglu, R. (Author), "Gaze-based numeric password entry using a real-time smart camera eye-tracking system," 12th Annual Pathways Symposium, TAMUS, TAMUCC, Corpus Christi, TX. (October 23, 2015).

Smith, S. W. (Author & Presenter), Smith, D. K. (Author), Shanks, S. E., Nicula, C. (Author), Trombley, C. (Author), Zimba, P. (Author), Mehrubeoglu, R. (Chair), "Mapping Pigment Distribution in Mud Samples through Hyperspectral Imaging," 12th Annual Pathways Symposium, TAMUS, TAMUCC, Corpus Christi, TX. (October 23, 2015).

Shanks, S. E. (Author & Presenter), Zimba, P. (Author), Tissot, P. (Author), Mehrubeoglu, R. (Author), "Microscale Algal Pigment Patterns in Salt Marsh Communities," 12th Annual Pathways Symposium, TAMUCC, TAMUCC, Corpus Christi, TX. (October 23, 2015).

Idowu, O. F. (Author & Presenter), Vo, P. (Author), Smith, S. W. (Author), Buck, G. (Author), Mehrubeoglu, R. (Author), "Temporal analysis of colonial morphology of bacteria normally found within environmental samples using hyperspectral imaging," 12th Annual Pathways Symposium, TAMUS, TAMUCC, Corpus Christi, TX. (October 23, 2015).

Vo, P. (Author & Presenter), Idowu, T. F. (Author), Smith, S. W. (Author), Buck, G. (Author), Mehrubeoglu, R. (Author), "Use of Hyperspectral Imaging to Distinguish between Bacterial Species Commonly Seen in Foodborne Illnesses," 12th Annual Pathways Symposium, TAMUS, TAMUCC, Corpus Christi, TX. (October 23, 2015).

Vo, P. H. (Author & Presenter), Idowu, O. F. (Author), Smith, S. (Author), Buck, G. W. (Author), Mehrubeoglu, R. (Author), "Use of hyperspectral imaging to distinguish between bacterial species commonly seen in foodborne illnesses," 12th Annual TAMUS Pathways Student Research Symposium, Texas A&M University System, Texas A&M University-Corpus Christi. (October 23, 2015).

Mehrubeoglu, R., "Lab-Based Hyperspectral Imaging Systems and Applications," CMSS 5690 Remote Sensing, Course by Dr. Feiqing Xie, TAMUCC. (December 2, 2014).

Mehrubeoglu, R., McLauchlan, L., Durham, J., "Link Management in Mobile Sensor Networks," 2014 IEEE Ubiquitous Positioning Indoor Navigation and Location Based Service (UPINLBS), IEEE, Omni Corpus Christi Hotel, Corpus Christi, TX. (November 20, 2014).

Caballero, M., Duque, A., Gironza, M., Kucuktekin, B., Martin, T., Vasquez, R., Mehrubeoglu, R., "Hybrid Energy Conversion and Storage System for Marine Environments," 2014 6th Annual IEEE Green Technologies Conference, IEEE, Corpus Christi, Texas. (April 3, 2014).

Mehrubeoglu, R., "Resolving Algal Species in Mixed Cultures using Hyperspectral Imaging," Faculty Seminar Series, School of Engineering and Computing Sciences, Texas A&M University-Corpus Christi. (November 15, 2013).

Roberson, W. (Author & Presenter), Cammarata, K., Mehrubeoglu, R., Simons, J., Shanks, S. E., Zimba, P. V., "Comparison of Imaging Technologies and Biomass Measures of Algal Epiphytes on Seagrass to Develop New Water Quality Monitoring Tools," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Gurses, E. (Presenter), Mehrubeoglu, R., "Determination of Skin State in Psoriasis using Digital Image Processing," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Teng, M. Y., Mehrubeoglu, R., King, S., Cammarata, K., Simons, J., "Developing and Parallelizing a Hyperspectral Image Processing Algorithm using Commodity Graphics Processing Units," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Livingston, D. W. (Presenter), Mehrubeoglu, R., Buck, G. W., "Hyperspectral Imaging as a Fast and Effective Method to Distinguish Among Bacterial Species," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Smith, S. W. (Presenter), Smith, D. K., Shanks, S. E., Zimba, P. V., Mehrubeoglu, R., "Hyperspectral Imaging of Mud Samples to Map 2D Pigment Distribution based on Spectral and Spatial Analysis," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Shanks, S. E. (Presenter), Mehrubeoglu, R., Zimba, P. V., "Identification of Microalgae in Sediments using HPLC and Hyperspectral Imaging," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Dhakal, S. (Presenter), Mehrubeoglu, R., "Improving the Performance of a Real-time Smart Camera-based Eye-tracking Algorithm," 11th Annual TAMUS Pathways Symposium, TAMUS, Texas A&M University-Kingsville, Kingsville, Texas. (November 8, 2013).

Smith, S., Smith, D., Mehrubeoglu, R., Strychar, K. B., "Hyperspectral Imaging of Coral State," 13th Annual Undergraduate Research Symposium, Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Smith, D. K., Smith, S. W., Shanks, S. E., Zimba, P. V., Mehrubeoglu, R., "Hyperspectral Imaging of Mud Samples to Investigate Pigment Distribution of Microorganisms," 13th Annual Undergraduate Research Symposium, Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Robinson, S., Mehrubeoglu, R., Simionescu, P.-A., "Preliminary Characterization of Fatigue Surface Defects Using Hyperspectral Imaging, Thermal Imaging and Color Photography," 13th Annual Undergraduate Research Symposium, Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Rahmes, L., Mehrubeoglu, R., "Real-time Computer Interface for Double-Integrating Spheres System," 13th Annual Undergraduate Research Symposium, Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Guerra, G., Rodriguez, C., Sun, S., Mehrubeoglu, R., "Waterproofing and Setting a Foundation for Wi-Fi Capabilities for a Complex Imaging System," 13th Annual Undergraduate Research Symposium, Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Livingston, D. (Author & Presenter), Mehrubeoglu, R. (Author), Buck, G. W., "Hyperspectral imaging of bacteria," 13th Annual Undergraduate Symposium, Sigma Xi, Texas A&M Univ-Corpus Christi. (October 12, 2013).

Smith, D., Smith, S., Lee, S., Mehrubeoglu, R., "Identifying Oyster Shell Weight, Thickness and Strength Trends in Three Imaging Modalities," Sigma Xi / College of Science and Engineering, Texas A&M University-Corpus Christi. (October 12, 2013).

Mehrubeoglu, R., "Laboratory Based Hyperspectral Imaging: Applications and Projects," Seminar, SPAWAR Systems Center-Pacific, San Diego, CA. (July 17, 2013).

Wang, X., Mehrubeoglu, R., Li, L., Zimba, P. V., "Data Mining for Hyperspectral Images from Mud Samples for Species Classification," 7th Annual Graduate Student Scholarly Works Symposium, ELITE Program, Office of Research Commercialization and Outreach, Texas A&M University-Corpus Christi. (May 3, 2013).

Teng, M. Y., Mehrubeoglu, R., King, S., Cammarata, K., Simons, J., "Developing and Parallelizing Hyperspectral Imaging algorithms using Commodity Graphic Processing Units," 7th Annual Graduate Student Scholarly Works Symposium, ELITE Program, Office of Research Commercialization and Outreach, Texas A&M University-Corpus Christi. (May 3, 2013).

Robinson, S., Mehrubeoglu, R., Simionescu, P.-A., "Comparative Analysis of Multiple Vision Systems for Metal Surface Defect Detection," 12th Annual Undergraduate Research Symposium, College of Science and Engineering and South Texas Chapter of Sigma Xi, Harte Research Institute, Texas A&M University-Corpus Christi. (March 2, 2013).

Rodriguez, L. A., Mahmoud, Y., Teng, M. Y., Buck, G. W., Mehrubeoglu, R., "Hyperspectral Investigation of Arterial Sections," 12th Annual Undergraduate Research Symposium, College of Science and Engineering and South Texas Chapter of Sigma Xi, Harte Research Institute, Texas A&M University-Corpus Christi. (March 2, 2013).

Smith, D., Smith, S., Mehrubeoglu, R., Smee, D. L., Simionescu, P.-A., "Investigating Oyster Shell Thickness and Strength Using Three Imaging Modalities: Hyperspectral Imaging Thermal Imaging, and Digital Photography," 12th Annual Undergraduate Research Symposium, College of Science and Engineering and South Texas Chapter of Sigma Xi, Harte Research Institute, Texas A&M University-Corpus Christi. (March 2, 2013).

Smith, S., Smith, D., Strychar, K. B., Mehrubeoglu, R., "Tracking Coral Hyperspectral Properties Across Coral Species and Coral State with a Hyperspectral Imaging System," 12th Annual Undergraduate Research Symposium, College of Science and Engineering and South Texas Chapter of Sigma Xi, Harte Research Institute, Texas A&M University-Corpus Christi. (March 2, 2013).

Wang, X., Mehrubeoglu, R., Olsen, M., Balasubramanya, M., "Hyperspectral Properties of the Surface Plasmon Resonant Signature of Au-Metal Nanoparticles," 2nd Annual Science and Engineering Graduate Research Forum, Marine Science Graduate Student Organization and College of Science and Engineering, Texas A&M University-Corpus Christi. (December 7, 2012).

Teng, M. Y., Mehrubeoglu, R., King, S., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass Using Hyperspectral Imaging and Parallel Programming," 2nd Annual Science and Engineering Graduate Student Forum, Marine Science Graduate Student Organization and the College of Science & Engineering, Texas A&M University-Corpus Christi. (December 7, 2012).

Teng, M. Y., Mehrubeoglu, R., King, S. A., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass using Hyperspectral Imaging and Parallel Programming," 11th Annual TAMUS Pathways Symposium, Galveston, TX. (November 2012).

Robinson, S. (Presenter), Mehrubeoglu, R. (Author), Simionescu, P.-A. (Author), "Comparing Three Vision Systems for Metal Surface Defect Detection," The 10th Annual Pathways Student Research Symposium, TAMUS, Galveston, TX. (November 9, 2012).

Teng, M. Y., Mehrubeoglu, R., King, S., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass Using Hyperspectral Imaging and Parallel Programming," The 10th Annual Pathways Student Research Symposium, TAMUS, Galveston, TX. (November 9, 2012).

Smith, D. K., Smith, S. W., Strychar, K. B., Mehrubeoglu, R. (Author), "Hyperspectral Imaging: A Tool for using Coral Health as a BioIndicator of Ocean Warming and Climate Change," The 10th Annual Pathways Student Research Symposium, TAMUS, Galveston, TX. (November 9, 2012).

Wang, X., Mehrubeoglu, R., Olson, M. A., Balasubramanya, M., "Hyperspectral Properties of the Surface Plasmon Resonant Signature of Au-Metal Nanoparticles," The 10th Annual Pathways Student Research Symposium, TAMUS, Galveston, TX. (November 9, 2012).

Teng, M. Y., Mehrubeoglu, R., King, S., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass Using Hyperspectral Imaging and Parallel Programming," 2012 NSF-STELS Symposium, NSF-STELS, Texas A&M University-Corpus Christi. (November 3, 2012).

Wang, X. (Presenter), Mehrubeoglu, R. (Author), Olson, M. A. (Author), Balasubramanya, M. (Author), "Hyperspectral Properties of the Surface Plasmon Resonant Signature of Au-Metal Nanoparticles," 2012 NSF-STELS Symposium, NSF-STELS, Texas A&M University-Corpus Christi. (November 3, 2012).

Mehrubeoglu, R. (Presenter), "The HOPI Lab: Projects and People," 2012 NSF-STELS Symposium, NSF-STELS, Texas A&M University-Corpus Christi. (November 3, 2012).

Trinh, T. ., Tang, M. Y., Garcia, M., Mehrubeoglu, R. (Author), "Data Management and User Authentication for the Remote HOPI System," 2012 Graduate Scholarly Works Symposium, Elite Program and Office of Research and Graduate Studies, Texas A&M University-Corpus Christi, Corpus Christi, Texas. (April 13, 2012).

Tang, M. Y., Su, P., Mehrubeoglu, R. (Author), Zimba, P. V., "Hyperspectral Analysis of Algae Species in Mixed Media (Third Place Winner, Posters)," 2012 Graduate Scholarly Works Symposium, Elite Program and Office of Research and Graduate Studies, Texas A&M University-Corpus Christi, Corpus Christi, Texas. (April 13, 2012).

Wang, X. (Author & Presenter), Mehrubeoglu, R. (Author), Balasubramanya, M. (Author), "Monte Carlo Simulations of Light Transport for Hyperspectral Imaging," 2012 Graduate Scholarly Works Symposium, Elite Program and Office of Research and Graduate Studies, Texas A&M University-Corpus Christi, Corpus Christi, Texas. (April 13, 2012).

Su, P., Mehrubeoglu, R. (Author), King, S., Strychar, K. B., "Spectral and Spatial Feature Extraction from Coral Hyperspectral Images (FIRST PLACE WINNER, Oral Presentations)," 2012 Graduate Scholarly Works Symposium, Elite Program and Office of Research and Graduate Studies, Texas A&M University-Corpus Christi, Corpus Christi, Texas. (April 13, 2012).

Mehrubeoglu, R., "Part I: Determining Glucose Levels In Turbid Media Using Diffuse Reflectance Polarimetric Imaging, TAMU; Part II: Determining Skin Lesion State Using Diffuse

Reflectance Spectroscopic Imaging, TAMU; Part III: Hyperspectral Imaging at the HOPI Lab, TAMUCC," Invited Speaker Presentation, Space and Naval Warfare Systems Center-Pacific, SSC-Pacific, San Diego, San Diego, CA, Summer 2011. (2011).

Huang, C.-H., Mehrubeoglu, R., "Modeling Optical Properties of Real-Time Data," Honors Symposium, Honors Program, TAMUCC. (December 3, 2011).

Paleti, N., Mehrubeoglu, R., "Integrating LabVIEW-based Tools to a Hyperspectral Imaging System to Measure Optical Properties," 9th Annual Pathways Student Research Symposium, TAMUS, College Station, TX. (November 11, 2011).

Nalluri, J. (Author & Presenter), Mehrubeoglu, R., "Investigation of Hyperspectral Images of biological media through cluster/parallel computing (BEST PRESENTATION AWARD)," 9th Annual Pathways Student Research Symposium, TAMUS, College Station, Texas. (November 11, 2011).

Pham, L. (Author & Presenter), Mehrubeoglu, R., "Real-time Remote Control of Hyperspectral Imaging System using LabVIEW Web Server," 9th Annual Pathways Student Research Symposium, TAMUS, College Station, TX. (November 11, 2011).

Su, P. (Author & Presenter), King, S., Strychar, K. B., Mehrubeoglu, R., "Using Hyperspectral Imaging to Characterize Spectral and Spatial Properties of Coral," 9th Annual Pathways Student Research Symposium, TAMUS, College Station, TX. (November 11, 2011).

Huang, C.-H., Mehrubeoglu, R., "GUI for Real-time Light Transmittance and Reflectance Data Collection," 11th Annual Undergraduate Research Symposium, Sigma Xi and Office of the Dean, TAMUCC. (October 8, 2011).

Cloud, K., Mehrubeoglu, R., "Spectral Characterization of Hyperspectral Imaging System using Optical Standards," 11th Annual Undergraduate Research Symposium, Sigma Xi and Office of the Dean, TAMUCC. (October 8, 2011).

Paleti, N., Steele, B. M., Savage, M. L., Rafalski, A. V., Pham, L. M., Waldbeser, L., Mehrubeoglu, R., "Detecting changes in cell structure using hyperspectral imaging," NIH Workshop 2011, 7th Inter-Institute Workshop on Optical Diagnostic and Biophotonic Methods from Bench to Bedside, SPIE/NIH, Bethesda, MD. (September 16, 2011).

Mehrubeoglu, R. (Author & Presenter), Durham, J., McLauchlan, L., Rosiles, G., Duncan, B., Ramos, A., "Virtual Collaboratorium in Virtual Environments to support Tactical ISR and Mission-Driven Acquisition," Summer Outbrief, SSC-Pacific/MITRE, SPAWAR, San Diego, CA. (July 27, 2011).

Karayaka, H. (Author), Mahlke, H. (Author & Presenter), Bogucki, D. (Author), Mehrubeoglu, R. (Author), "A Rotational Wave Energy Conversion System Development and Validation with Real Ocean Wave Data," IEEE Power and Energy Society General Meeting, IEEE, Detroit MI. (July 25, 2011).

Karayaka, H. (Author & Presenter), Mehrubeoglu, R. (Author), Yildiz, F. (Author), Caruso, K. (Author), "A Nuclear Power Industry Career Development Workshop for High School Teachers in a Hispanic Serving Institution," 2011 ASEE Annual Conference and Exposition, ASEE, Vancouver, CA. (June 28, 2011).

Paleti, N. (Author & Presenter), Deshu, R., Lanka, S., Mehrubeoglu, R., "Hyperspectral imaging system for biomedical and environmental applications," 5th Graduate Scholarly Works Symposium, ELITE/Office of Research and Graduate Studies, TAMUCC. (April 22, 2011).

Pham, L. (Author & Presenter), Muddu, R. (Author & Presenter), Le, H. T. (Author & Presenter), Lee, J. (Author & Presenter), Ryu, D. (Other), Mehrubeoglu, R., "Real-Time Eye Tracking Using a Smart Camera (FIRST PRIZE WINNER IN COMPUTER SCIENCE)," 5th Graduate Scholarly Works Symposium, ELITE/Office of Research and Graduate Studies, TAMUCC. (April 22, 2011).

Karayaka, H., Mahlke, H. (Author & Presenter), Mehrubeoglu, R. (Author), "The Development of a Rotational Wave Energy Conversion System: Design and Simulations," IEEE Green Technologies Conference 2011, IEEE, Baton Rouge, LA. (April 15, 2011).

Karayaka, H. (Author & Presenter), Mehrubeoglu, R. (Author), Fernandez, J. D. (Author), "A MULTIDISCIPLINARY APPROACH TO TEACHING "ENERGY CONVERSION" COURSE," 2011 ASEE-GSW Conference, ASEE-GSW, Houston, TX. (March 11, 2011).

Mehrubeoglu, R., "Part I: Determining Glucose Levels in Turbid Media using Diffuse Reflectance Polarimetric Imaging; Part II: Determining Skin Lesion State using Diffuse Reflectance Spectroscopic Imaging," SSC-Pacific, San Diego, California. (June 29, 2010).

Binkerd, C. (Author & Presenter), Mehrubeoglu, R., "Sustainable Retention Initiatives," 44th Annual Association for Computer Educators Conferenc, Austin, TX. (October 2008).

Contracts, Grants and Sponsored Research

Mehrubeoglu, Ruby (Principal), "Thermal Imaging using Infrared Camera," Sponsored by Texas Research Development Fund, Texas A&M University-Corpus Christi, \$29,592.00. (October 1, 2010 - August 31, 2011).

Mehrubeoglu, Ruby (Co-Principal), Attarzadeh, Farrokh (Principal), Talusani, Reddy (Co-Principal), Gurkan, Deniz (Co-Principal), Moges, Mequanint (Co-Principal), "An Innovative Approach to Learning via Peer-to-Peer Undergraduate Mentoring in Engineering Technology Laboratories," Sponsored by National Science Foundation, Federal, \$199,988.00. (April 1, 2008 - June 30, 2011).

Mehrubeoglu, Ruby (Co-Principal), Simionescu, Petru-Aurelian (Principal), Fernandez, John (Co-Principal), "Engineering Recruitment Programs: 2010 Engineering Summer Program," Sponsored by Texas Higher Education Coordinating Board, State, \$18,000.00. (May 1, 2005 - January 31, 2011).

Mehrubeoglu, Ruby (Principal), "Enhancement of Medical Images for Automatic Content Interpretation," Sponsored by National Institutes of Health, Federal, \$14,300.00. (September 1, 2008 - June 30, 2010).

Mehrubeoglu, Ruby (Principal), "Tracking Objects in Motion using Multiple Cameras," Sponsored by Texas Research Development Fund, Texas A&M University-Corpus Christi, \$12,000.00. (March 2008 - August 31, 2009).

Mehrubeoglu, Ruby (Co-Principal), "Initiatives to Increase Participation in Computer Science and Engineering," Sponsored by Texas Workforce Commission, State, \$82,200.00. (January 1, 2008 - August 31, 2009).

Mehrubeoglu, Ruby (Principal), "STD Project on the Status of Sexually Transmitted Diseases in North Cyprus," Sponsored by European Union, Other, \$6,000.00. (2003).

Grant

Mehrubeoglu, Ruby (Co-Principal), "AGEP-T: Collaborative Research: Advancing Interdisciplinary STEM Graduate Education in Energy and Sustainability Disciplines," Sponsored by NSF - HRD, Federal, \$87,000.00. (September 11, 2013 - February 28, 2018).

Zhang, Hua (Principal), Mehrubeoglu, Ruby (Principal), "An integrated characterization and simulation system for microplastics in coastal watersheds," Sponsored by TAMUCC, Local, \$20,000.00. (2016 - 2017).

Mehrubeoglu, Ruby (Co-Principal), Fernandez, John (Principal), Escobar, Krystal (Co-Principal), Gage, Jeannie (Co-Principal), Hill, Patricia (Co-Principal), "Expanding the STEM Pool With Transfer Scholarships (ESP)," Sponsored by NSF-DUE, Federal, \$597,290.00. (May 15, 2012 - May 14, 2017).

Kar, Dulal C (Principal), Tatum, Terry (Co-Principal), Gibeaut, James (Co-Principal), Xie, Feiqin (Co-Principal), Mehrubeoglu, Ruby (Co-Principal), Chen, Ruizhi (Co-Principal), "CC-NIE Networking Infrastructure: Establishing a Science DMZ for Research in Coastal, Marine, Atmospheric, Environmental, and Geospatial Computing Sciences," Sponsored by National Science Foundation, Federal, \$495,466.00. (October 1, 2013 - September 30, 2015).

Mehrubeoglu, Ruby (Principal), Simons, James (Co-Principal), Cammarata, Kirk (Co-Principal), Zimba, Paul V. (Co-Principal), "Seagrass and Epiphyte Hyperspectral Imaging for Efficient Integrated Measurement of Water Quality," Sponsored by Texas General Land Office, State, \$60,604.00. (October 12, 2012 - March 31, 2015).

Mehrubeoglu, Ruby, "Proposal Resubmission Grant," Sponsored by Office of Research, Commercialization and Outreach, Texas A&M University-Corpus Christi, \$2,500.00. (November 1, 2013 - July 31, 2014).

Mehrubeoglu, Ruby (Co-Principal), "Integrated Partnership for Education Training and Mentoring to the Doctorate," Sponsored by National Institutes of Health (NIH), Federal, \$218,687.00. (September 25, 2013 - March 31, 2014).

Chopin, Suzzette Rita (Principal), Billiot, Eugene J (Co-Principal), Brouillard, Pamela J. (Co-Principal), Buck, Gregory W. (Co-Principal), Mehrubeoglu, Ruby (Co-Principal), Meyer, Pamela (Co-Principal), Olson, Mark Anthony (Co-Principal), leibowitz, julian (Co-Principal), jones, harlan (Co-Principal), jones, lovell (Co-Principal), niesel, david (Co-Principal), Jorgensen, Daniel J (Supporting), "Integrated Partnership for Education, Training and Mentoring to the Doctorate," Sponsored by NIH, Federal, \$218,687.00. (September 25, 2013 - March 31, 2014).

Mehrubeoglu, Ruby (Principal), Cammarata, Kirk (Co-Principal), Simons, James (Co-Principal), Zimba, Paul (Co-Principal), "Seagrass and Epiphyte Hyperspectral Imaging for Efficient Integrated Measurement of Water Quality," Sponsored by Texas General Land Office, State, \$60,604.00. (October 12, 2012 - March 1, 2014).

Karayaka, Hayrettin (Principal), Mehrubeoglu, Ruby (Co-Principal), Fernandez, John D (Co-Principal), "Nuclear Workforce Development Scholarships and Enhancement Program," Sponsored by Nuclear Regulatory Commission, Federal, \$180,000.00. (October 1, 2010 - September 30, 2013).

Mehrubeoglu, Ruby, "Proposal for Nuclear Workforce Development Scholarships and Enhancement Program," Sponsored by Nuclear Regulatory Commission, Federal, \$180,000.00. (September 1, 2010 - September 30, 2013).

Mehrubeoglu, Ruby (Principal), Zimba, Paul V. (Co-Principal), "Hyperspectral Imaging for Determining the Microdistribution of Microorganisms in Lake Sediments," Sponsored by Texas

Research Development Fund (TRDF), Texas A&M University-Corpus Christi, \$25,000.00. (September 1, 2012 - August 31, 2013).

Mehrubeoglu, Ruby (Principal), Balasubramanya, Mirley (Co-Principal), Strychar, Kevin B. (Co-Principal), Waldbeser, Lillian S (Co-Principal), "MRI-R2: Development of Hyperspectral Optical Property Instrumentation (HOPI) for Biomedical and Environmental Research," Sponsored by National Science Foundation, Federal, \$524,171.00. (March 1, 2010 - February 28, 2013).

Mehrubeoglu, Ruby (Principal), "Investigating Imaging Modalities for Characterizing Vascular Pathophysiology, at Barts & the London, Queen Mary, University of London," Sponsored by Burroughs Wellcome Fund, Private, \$5,000.00. (May 14, 2012 - June 26, 2012).

Simionescu, Petru-Aurelian (Principal), Karayaka, Hayrettin (Co-Principal), Mehrubeoglu, Ruby (Co-Principal), "* THECB - Engineering Summer Program for High School Juniors and Seniors," Sponsored by Texas Higher Education Coordinating Board, State, \$20,000.00. (May 15, 2011 - August 31, 2011).

Scholarly and Creative Awards and Honors

Recognition - McNair Scholars Mentor, McNair Scholars Program. (2017).

Texas Undergraduate Research Day at the State Capitol, Coordinated by Council of Public University Presidents and Chancellors (CPUPC), the Independent Colleges and Universities of Texas, Inc. (ICUT) and the Texas Association of Community Colleges (TACC). (2017).

2nd Place Student Poster in Undergraduate Engineering Category, 2016 Pathways Symposium, Prairie View, TAMUS. (2016).

Grant in Aid of Research Award, Sigma Xi. (2015).

2nd Place, Undergraduate Poster from HOPI Lab (Shane Smith Presenter), Marine Science Graduate Student Organization (MSGSO) / College of Science and Engineering. (2015).

McNair Faculty Mentor Recognition Luncheon. (2014).

Office of Naval Research (ONR) Summer Faculty Research Fellowship, Office of Naval Research, Department of Defense. (2013).

3rd Place Best Paper Award, "Nuclear Workforce Development Scholarships and Enhancements Program Phase I: Outreach and Recruiting," by B. Karayaka and R. Mehrubeoglu, 120th ASEE Annual Conference and Exposition, Energy Conservation and Conversion Division, Atlanta, GA, June 23-28, 2013. (2013).

Dean's Nuggets, Engineering Research in Texas. (2012).

Summer Collaborative Research Travel Grant to Barts & the London, Queen Mary, University of London, through Burroughs Wellcome Fund. (2012).

ONR Summer Faculty Research Program Fellow, Office of Naval Research. (2011).

Recognition, the Islander, TAMUCC, p. 10, Fall 2011 issue of the biannual magazine. (2011).

Best student presentation award, Texas A&M University System. (2011).

Cording Faculty, College of Science and Technology, TAMUCC. (2011).

Best Student Poster in Computer Science, TAMUCC. (2011).

Best Session Paper Award, IIIS. (2011).

ONR Summer Faculty Research Program Fellow, Office of Naval Research. (2010).

ONR Summer Faculty Research Program Fellow, Office of Naval Research. (2009).

SERVICE

Department

Faculty Advisor, IEEE Student Branch at TAMUCC. (2016 - Present).

Committee Member, ABET Steering Committee. (September 2013 - Present).

Committee Chair, Electrical Engineering Faculty Search Committee. (2016 - 2017).

Peer Reviewer, Peer Reviewer - Faculty In-class Teaching. (February 2017 - March 2017).

Attendee, Meeting, CBE Program in MCET Meeting. (January 2017).
 Member, 2016 National Engineers Week Planning Group. (2015 - 2016).
 Committee Chair, School of Engineering and Computing Sciences Curriculum Committee. (2015 - 2016).
 Certified Lead Software Inspector, FIRST Tech Challenge (FTC) Games. (February 2013 - 2016).
 Committee Member, ABET Steering Committee for Mechanical Engineering Technology. (September 2014 - September 2016).
 Faculty Advisor, IEEE Student Branch at TAMUCC. (2013 - 2015).
 Committee Member, Mechanical Engineering Faculty Search Committee. (2012 - 2015).
 Committee Member, ABET Committee for Mechanical Engineering and Engineering Technology. (September 2014 - September 2015).
 Committee Chair, Senior Administrative Assistant Search Committee. (September 2014 - October 2014).
 Faculty Interviewer, Faculty Candidate One-on-one Interviews. (May 2014).
 HOPI Lab Tour. (April 2014).
 E-Week Activities Coordinator. (February 2014).
 Presenter, "Interviewing Skills" Seminar, E-Week. (February 2014).
 Presenter, "Resume Writing" Workshop, E-Week. (February 2014).
 Attendee, Meeting, Flint Hills Resources - Campus Tour. (January 2014).
 Coordinator of Engineering Events, Science Olympiad Engineering Competitions. (September 2011 - February 2013).
 Committee Chair, Senior Mechanical Engineering Faculty Search Committee. (October 2011 - 2012).
 Committee Chair, Task Force, NPI Proposal Priority List. (January 2012 - February 2012).
 Committee Member, Mechanical Engineering Scholarships. (2011).
 Committee Member, Junior Mechanical Engineering Faculty Search Committee. (2010 - 2011).
 Committee Member, Mechanical Engineering Scholarships. (2010 - 2011).
 Committee Member, Physics Faculty Search Committee. (2010 - 2011).
 Committee Chair, Senior Mechanical Engineering Faculty Search Committee. (2010 - 2011).
 Faculty Advisor, SME TAMU-CC Student Chapter. (2008 - 2011).
 Academic Advisor, Summer Freshman Orientation. (August 2011).
 Organizer, Capstone Projects Competition. (May 2011).
 Department Representative, Graduate Open House. (February 2011).
 Faculty Contestant, ASEE Student Chapter - Quiz Bowl. (February 2011).
 Organized Guest Speaker Presentation, Guest Speaker Presentation, Rick Bell, "Patenting and IP Issues". (January 2011).
 Attendee, Meeting, South Texas Alliance in Engineering. (2010).
 Mechanical Engineering and Engineering Technology, Library Liaison. (2009 - 2010).
 Committee Member, Mechanical Engineering, Faculty and Staff Search Committees. (2008 - 2010).
 Committee Chair, Electrical Engineering Technology Faculty Search Committee. (2008 - 2009).
 Engineering Technology, Library Liaison. (2008 - 2009).
 Committee Member, Engineering Technology MS Program Assessment Committee. (2006 - 2007).

College

Committee Member, College of Science and Engineering Library Committee. (2015 - 2018).
 Committee Member, College of S&E Teaching Assistant Assignment Committee. (November 2015 - August 2017).
 Judge, 5th Annual Marine Science Graduate Student Organization (MSGSO) Student Research Forum. (December 2015).
 Committee Member, Center for Faculty Excellence. (September 2012 - May 2015).
 Attendee, Meeting, Flint Hills Resources On-site Tour and Meeting. (June 2014).
 Committee Member, College of S&E Curriculum Committee. (September 2013 - May 2014).

Panelist, 2nd Annual Science Innovation Panel Discussion and Poster Session; Panelist. (April 2014).
Introduced a Speaker; Participated in the Symposium; Was Available for Undergraduate Students as a Resource, NIH BUILD Symposium. (February 2014).
Committee Member, Core Curriculum Committee (FC3). (January 2013 - December 2013).
President, Sigma Xi South Texas Chapter. (2012 - 2013).
Committee Chair, Organizing Committee, 12th Annual Undergraduate Research Symposium. (September 2012 - March 2013).
Committee Member, S&E College Research Enhancement Committee. (2011 - 2012).
Committee Member, S&T Curriculum Committee. (September 2010 - May 2011).
Committee Member, S&T Distinguished Lecturers Selection Committee. (August 2009 - May 2011).
Judge, 5th Graduate Scholarly Works Symposium, TAMUCC. (April 2011).
Representative for Department Chair in his absence, College Chairs Meetings. (2010).

University

Committee Member, WiL (Women in Leadership) Program, College of Science and Engineering Representative. (November 2016 - Present).
Faculty Mentor, LSAMP Program. (2012 - Present).
Faculty Mentor, McNair Scholars. (2011 - Present).
Faculty Mentor, HOPI Lab, Undergraduate Research. (2010 - Present).
Recruitment Event Attendee, Mechanical Engineering and Engineering Technology, Island Days. (2005 - Present).
Presenter for Recruitment for Engineering and Engineering Technology Programs, Island Days "Touch of Class Presentation". (February 2017).
Robot Inspector, FTC (FIRST Tech Challenge) Robotics Competition. (January 2017).
JUDGE, 6th Annual Marine Graduate Student Organization (MGSO) Research Forum, HRI, TAMUCC. (December 2016).
Conference-Related, 2016 TAMUS Pathways Symposium. (November 2016).
Conference-Related, 4TH ANNUAL TAMUS E&S AGEP CONFERENCE. (November 2016).
Faculty Mentor, SOAR Undergraduate Research Exploration Program. (2012 - 2015).
Conference-Related, 2015 SACNAS Conference. (October 2015).
Professionals/Students Round Table Participant, 2015 SACNAS Conference, Engineering Round Table. (October 2015).
Judge, 2015 SACNAS Conference, Poster Judge. (October 2015).
Conference-Related, AGEP Annual Conference. (October 2015).
"Touch of Class" Presenter for Engineering Programs, Island Days. (October 2015).
Conference-Related, 2015 TAMUS Pathways Symposium. (October 2015).
Student Recruiter, Island Days. (October 2015).
Committee Member, Master's Working Group, Graduate Studies. (2014).
Faculty Mentor, Summer Incoming Student Orientations. (2014).
Committee Member, Faculty Core Curriculum Committee. (2012 - 2013).
Committee Member, Center for Faculty Excellence. (August 2012 - May 2013).
Committee Member, University Research Enhancement Committee. (September 2010 - May 2012).
Committee Chair, Faculty Affairs Committee, Faculty Senate. (August 2010 - May 2011).
Committee Member (2008-09), Committee Chair-Elect (2009-10), Committee Chair (2010-11), Faculty Renaissance Center (now Center for Faculty Excellence). (August 2008 - May 2011).
Committee Member, Faculty Senate. (August 2008 - May 2011).
Committee Member, University Scholarship Committee. (August 2008 - May 2011).
Seminar Organizer, Dr. A. Gandjbakhche, NIH/NICHD Seminar. (March 2011).
Judge, oral presentations (2009, 2010), Sigma Xi 9th and 10th Undergraduate Research Symposium. (2009 - 2010).
Judge, Graduate Research Competition. (2009).

Task Force Member, Campus Signage Task Force. (2008).

Professional

Committee Member, 2011 SPIE Optics and Photonics, Mathematics of Data/Image Pattern Coding, Compression, and Encryption with Applications XIII, San Diego, CA, August 21-26, 2011.

Member, Texas Higher Education Coordinating Board, Electrical Engineering Field of Study Subcommittee. (January 2016 - Present).

Graduate Faculty Representative (GFR), Ph.D. Committee of Heather Wade, TAMUCC. (May 2014 - Present).

Editor, Associate Editor, Journal of Real-Time Image Processing. (2011 - Present).

Conference Committee Member, 2016 SPIE Optics and Photonics, Imaging Spectrometry XXI Conference. (2015 - 2016).

Reviewer, Conference Paper, ASEE, 123rd Annual Conference & Exposition, New Orleans, USA, 26-29 June 2016. (2015 - 2016).

Committee Member, SPIE Optics+Photonics, Imaging Spectrometry XXI Conference. (2015 - 2016).

Session Chair, 2016 SPIE Optics+Photonics, Imaging Spectrometry XXI Conference. (August 2016).

Reviewer, Journal Article, IEEE Transactions on Human-Machine Systems. (February 2016).

Reviewer, Journal Article, IEEE Transactions on Image Processing. (February 2016).

Panelist Reviewer, National Defense Science and Engineering Graduate (NDSEG) Fellowship Program Review Panel. (January 2016 - February 2016).

Reviewer, Book, CHOICE. (December 2015 - February 2016).

Chairperson, IEEE Corpus Christi Section. (2015).

Reviewer, Grant Proposal, NSF SBIR/STTR Phase I: Optical Instrumentation Panel. (2015).

Conference Committee Member, 2015 SPIE Optics and Photonics, Imaging Spectrometry XX Conference. (2014 - 2015).

Member, IEEE Region 5 Conference Committee. (January 2014 - December 2015).

Chairperson, IEEE Region 5 Women In Engineering (WIE) Coordinator/. (January 2014 - December 2015).

Chairperson, 2014 6th Annual IEEE Green Technologies Conference. (January 2013 - April 2015).

Session Chair, 2015 7th annual IEEE Green Technologies Conference. (April 2015).

Air Force Summer Faculty Fellowship Program (AF SFFP) Review Panel Member. (2014).

Conference Committee Member, 2014 SPIE Optics and Photonics, OP406: Imaging Spectrometry XIX Conference. (2013 - 2014).

Member, IEEE E-Week Subcommittee. (2013 - 2014).

Conference General Chair, 2014 6th Annual IEEE Green Technologies Conference. (2012 - 2014).

Member, IEEE EWeek 2014 Committee. (2012 - 2014).

Reviewer, Grant Proposal, NSF 2014 HBCU-RISE Program. (September 2014).

Committee Chair, IEEE Corpus Christi Section - Professional Activities Committee for Engineers (PACE). (May 2014).

Reviewer, Grant Proposal, NSF Graduate Research Faculty Fellowship (GRFP) Panel. (January 2014).

Reviewer, Grant Proposal, NSF SBIR/STTR Phase I Panel, Optical Instrumentation. (January 2014).

Reviewer, Journal Article, IEEE Transactions on Multimedia. (2013).

NSF GRFP Review Panelist, National Science Foundation. (2013).

Reviewer, Ad Hoc Reviewer, NSF CREST Program. (2013).

Reviewer, Conference Paper, 2013 Annual ASEE Conference and Exposition. (2012 - 2013).

Member, 2013 IEEE MGA Awards and Recognition Committee (ARC). (January 2012 - December 2013).

Technical Program Committee Member, 2013 IS&T/SPIE Electronic Imaging – Real-Time Image and Video Processing Conference, February 6-7, 2013. (2012 - 2013).
Committee Chair, IEEE Region 5 Awards & Recognition Committee. (2012 - 2013).
Reviewer, Conference Paper, Frontiers in Education Conference (IEEE/ASEE). (May 2013).
Reviewer, Conference Paper, 2013 IEEE Workshop on Robot Vision (WorV 2013). (2012).
Committee Member, IEEE MGA Awards Subcommittee – Industrial Relations. (2012).
Reviewer, Conference Paper, 2011 and 2012 Annual ASEE Conference and Exposition. (2011 - 2012).
Committee Member, 2012 SPIE Photonics Europe, Real-Time Image and Video Processing Conference. (2011 - 2012).
Technical Committee Co-Chair, IEEE Green Technologies Conference. (2011 - 2012).
External Reviewer, Faculty Promotion and Tenure Portfolio, Institution Confidential. (September 2012).
Session Chair, IEEE International Conference on Imaging Systems and Techniques (IST 2012), Hyperspectral Imaging. (July 2012).
Air Force Summer Faculty Fellowship Program (AF SFFP) Review Panel Member. (January 2012).
Program Committee Member, 26th International Conference on Image and Vision Computing, New Zealand, 2011. (2011).
Officer, Secretary, IEEE Corpus Christi Section. (January 2011 - December 2011).
Reviewer, Journal Article, Optical Engineering (SPIE). (2011).
Reviewer, Conference Paper, 2011 IEEE Green Technologies Conference. (2010 - 2011).
Committee Member, 2011 IS&T/SPIE Electronic Imaging, Real-Time Image and Video Processing Conference, Electronic Imaging. (2010 - 2011).
Session Chair, 118th ASEE Annual Conference and Exposition. (June 2011).
IEEE Corpus Christi Section Delegate, IEEE USA Annual Meeting. (March 2011).
Review Panel Member, NSF Graduate Research Fellowship Program (GRFP). (February 2011).
Advisor, Society of Manufacturing Engineers (SME) Bioengineering Tech Group. (2010).
Chairperson, Institute of Electrical and Electronics Engineers (IEEE) Corpus Christi Section. (2009 - 2010).

Consulting

Government, National Science Foundation, Washington, DC. (2015).
For Profit Organization, Surface Optics Corp., San Diego, CA. (2015).
Government, 2012 Department of Defense (DoD) National Defence Science and Engineering Graduate (NDSEG) Fellowship, Electrical Engineering Panel, Arlington, VA. (February 25, 2012).
Government, Air Force Summer Faculty Fellowship Program (AF SFFP) Review Panel, online. (January 16, 2012 - January 27, 2012).
Centice Corporation, North Carolina, USA. (August 2009 - September 2009).

Public

Committee Member, Book Fair Committee. (September 2015 - June 2016).
Lead Robot Inspector, FTC (First Tech Challenge) Championship. (January 2016).
Attendee, Meeting, STEM Flint Hills Resources Center for Excellence, Texas State Aquarium. (May 2015).
Event Director, Write It Do It Competition, High School, Science Olympiad. (March 2015).
Event Director, Write It Do It Competition, Middle School, Science Olympiad. (March 2015).
Presenter, "What is Engineering?" & Question and Answer Session for Girls. (February 2014).
Event Director, Write It Do It Competition, Science Olympiad. (March 2011 - February 2013).
Chairperson, IEEE Corpus Christi Section. (January 2012 - December 2012).
Guest Speaker, Sinton High School. (October 2011).
Judge, 6th-8th Graders, 23rd Annual Coastal Bend Science Fair. (April 2011 - May 2011).
Guest Speaker, Sinton Middle School. (February 2011).

Head Judge, 21st Annual Coastal Bend Science Fair. (2010).
Judge, National Association of Women in Construction (NAWIC) Chapter #4 CAD Program Competition. (2010).
Organizer, Technical Seminars open to the public, IEEE Corpus Christi Section. (2006 - 2010).
Notebooks Judge, 2006, 2009, Best Robotics Competition. (2006 - 2009).
Director, UIL Calculator Contest. (2008).
Judge, 17th - 20th Annual Coastal Bend Science Fair Competitions. (2005 - 2008).