

FARUK YILDIZ

Associate Professor – Engineering Technology
 Department of Agricultural Sciences and Engineering Technology
 Sam Houston State University
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EDUCATION

- Doctor of Industrial Technology (DIT), 2008, University of Northern Iowa, Cedar Falls, IA.
- M.S. Computer Science, 2005, The City College of City University of New York, New York, NY.
- B.S. Computer Science, 2000, M. Kh. Dulaty Taraz State University, Taraz, Kazakhstan.

PROFESSIONAL EXPERIENCE

- Associate Professor, Department of Agricultural Sciences and Engineering Technology, Sam Houston State University, 2014 – present
- *Assistant Professor*, Department of Agricultural and Industrial Sciences, Sam Houston State University, 2008 – present
 - Teaching – Industrial Technology
 - ITEC 1340 Electronics Technology I (DC Circuits)
 - ITEC 2320 Electronics Technology II (AC Circuits)
 - ITEC 2350 Solid State Electronics
 - ITEC 3373 Industrial Electronics
 - ITEC 4373 Digital Electronics
 - ITEC 3376 Microcontroller Applications
 - ITEC 1361 Engineering Graphics
 - ITEC 4339 Advanced Computer Aided Design
 - ITEC 4367 Engineering Materials Technology (Mechanical Modeling)
 - ITEC 4388 3D Parametric Design
 - ITEC 4340 Alternative Energy Technology
 - ITEC 4369 Energy Harvesting Systems from Renewable Energy Sources
 - ITEC 4369 Renewable Energy Technology – Online
 - ITEC 3340 Solar and Wind Energy Systems
 - ITEC 4369 Special Topics: Instrumentation and Interfacing
 - Faculty advisor
 - ATMAE Student Chapter – 2009 to present
 - SHSU Renewable and Clean Energy Association – 2013
 - Committees
 - SHSU – Student Organizations Board – 2014- Present
 - Curriculum & Catalog Committee, 2014 - Present
 - Promotion/Tenure/Post-Tenure Committee, 2014 - Present
 - Webpage Update and Maintenance, 2014 - Present
 - ETEC Marketing Committee, 2014 - Present
 - SHSU Credit By Examination Committee, 2013 – Present
 - Pirkle ET Center, Academic Building Programming Committee, 2012 – Present
 - Faculty Merit/FES Committee, 2012 – Present

- Industrial Technology Advisory Committee, 2008 – Present
 - Industrial Technology Alumni Relations, 2009 – Present
 - Industrial Technology Faculty Search Committee, 2010 – Present
 - IT Program Curriculum Committee, 2010 – Present
 - Recruitment and ExL in Ag, 2011 – 2012
 - Faculty Retreat Committee, 2011
 - Nomination Committee, 2011 – Present
- Academic Adviser
- Graduate Student Committee
 - Served on 6 graduate student committees
 - Christiaan Marius Meiring, Advisor
 - Timothy Hunt, Committee Member
 - Daniel Hendren, Committee Member
 - Clint Wilkes, Committee Member
 - Eric Wilburn, Committee Member
 - Mariana Freites, Committee Member
- Recruitment
- *Graduate Teaching & Research Assistant*, Industrial Technology, University of Northern Iowa, Cedar Falls, IA. (2005-2008)
 - Teaching Assistant
 - 330:037 Introduction to Circuits
 - 330:167 Power Electronics Applications
 - 330:039 Circuit & Systems
 - 330:038 Introduction to Electrical Power and Machinery
 - Research Assistant
 - Energy harvesting, conversion, and storage systems
 - Data acquisition systems from renewable energy sources
 - Hydrogen fuel cell to electricity conversion for home appliances
 - Electricity generation techniques using active/passive human power
 - Data acquisition using NI LabView and National Instruments tools
 - Self powered wireless sensor networks in industrial applications
- *Database and Web Administrator*, Strategic Marketing Services, University of Northern Iowa, Cedar Falls, IA. (May 2007 – July 2008)
- *Math-Science Instructor and Tutor*, Classic Upward Bound Program, University of Northern Iowa, Cedar Falls, IA. (May 2007 – July 2008)
 - Pre-Calculus, Advanced Placement Calculus, Geometry
 - Math teacher for summer semesters
 - Math-Science tutor for fall and spring semesters
- *IT Computer Administrator*, College of Natural Sciences, University of Northern Iowa, Cedar Falls, IA. (August 2005 – August 2007)
 - IT support for faculty and staff computers
 - System and network administration for computer labs
 - Advanced software installation and troubleshooting
- *Hitch, Wheel, Tire and Track Engineering*, Product Engineering Center, John Deere Waterloo Works, Waterloo, IA (September 2005 – July 2008)

- 3D-design and modeling of tractor components using Pro/E Wildfire for Hitch, Wheel, Tires, and Track Engineering Group
 - Creating eng. drawings with geometric dimensioning and tolerancing (GD&T)
 - Creating and maintaining 3D Top-Down engineering assemblies to help manufacturing, production, and assembly processes
- *IT Administrator*, Tiger Zone, Inc., Fort Lee, NJ. (February 2005 – August 2005)
 - IT support for cashier computers, barcode systems, and camera systems.
- *IT Administrator*, Convenience Express, Inc., North Bergen, NJ. (February 2005 – August 2005)
 - IT support for store cashier computers, barcode systems, computers, and camera systems.
- *Database Management and Web Developer*, Staff Counselor's Office, OHRM/DOD, United Nations Headquarters, New York City, NY. (February 2004 – August 2004)
 - Design and maintain division web site under intranet linked to database
 - Design and maintain new databases under SQL server
 - Teach new database systems and web interactions to department employees
- *Technician*, Electrical and Engineering Maintenance, Nadir Electrical Engineering Inc., Istanbul, Turkey. (1991-1995)
 - Residential and commercial contract work
 - All types of electrical maintenance and repair
 - Basic plumbing and repair
 - Reading and auditing engineering drawings (electrical)

RESEARCH

- Conduct research in the area of renewable energy systems with focus on photovoltaic solar energy, wind energy, thermoelectric, piezoelectric, energy harvesting, conversion, and storage systems, and electric vehicle technology.
- Conduct research in the area of renewable energy education with a focus on building affordable renewable energy training systems and promoting STEM education through applied energy education.
- Conduct research in the area of computer aided design and drafting with a focus on spatial visualization in a 2D versus 3D CAD courses.

Book & Encyclopedia Chapters

- **Yildiz, F.** 2013. Renewable Energy Education: Implementation of an Energy Training Unit, Energy Education and Training. *Encyclopedia of Energy Engineering and Technology*. February 28, 2013. Published by Taylor & Francis DOI: 10.1081/E-EEE-120042928. ISBN: 0-8493-3653-8; eISBN: 0-8493-3896-4. *Note: EEE invites authors to submit.*

Peer Reviewed Journal Publications

1. **Yildiz, F.**, Pecen, R. 2014. Photovoltaic Solar-Wind Hybrid Power System Design and Implementation. *Technology Interface International Journal (TIIJ)*. Vol. 15, No. 2. ISSN# 1523-9926. Fall/Winter 2014.
2. **Yildiz, F.** 2014. Conversion of a Gasoline Powered Boat to a Hybrid Electric Boat. *ASEE Journal of Engineering Technology*. [In Review- Accepted, Spring 2015]
3. **Yildiz, F.** 2013. Self-Sufficient Energy-Efficient Green Building Design Projects. *The Journal of Management & Engineering Integration (JMEI)*. ISSN# 1939-7984. Vol. 6, No.1.
4. **Yildiz F.**, Muller, J., Kingman, D, Ullrich, D., Coogler, K.L., Crockford, W.W. 2013. Mobile Renewable Energy Education to Promote STEM Education in Rural School Districts. *International Journal of Research & Innovation (IJERI)*. Vol. 5, No. 2. Print ISSN: 2152-4157, Online ISSN: 2152-4165.
5. **Yildiz, F.** 2012. Lab Experiments on Renewable Energy using Microsoft Visio and Inexpensive Apparatus, Educational Module, *Electronic Library of the Center for Sustainable Engineering*, 12-40-R at www.csengin.org. Engineering Pathway, December 2012.
6. **Yildiz, F.** 2012. Design and Development of a Multiple Concept Educational Renewable Energy Mobile Mini-Lab for Experimental Studies. *International Journal of Engineering Research and Innovations (IJERI)*. Vol. 4, No. 2. Print ISSN# 2152-4157, Online ISSN# 2152-4165. Fall/Winter 2012.
7. ***Yildiz, F.**, Humston, J., Pecen, R. 2012. Promoting STEM to Young Students by Renewable Energy Applications. *Journal of STEM Education: Innovations and Research (JSTEM)*. ISSN# 1557-5284, Vol. 13, No. 3. May-June 2012. * Corresponding Author
8. **Yildiz, F.**, Baltaci, K. 2011. Challenges of EVs and HVs to the US Electrical Power Grid. *International Journal of Engineering Research and Innovations (IJERI)*. Vol. 3, No. 1. Print ISSN# 2152-4157, Online ISSN# 2152-4165. Spring/Summer 2011.
9. **Yildiz, F.**, Muns, N.C., Coogler, K.L. 2011. A General Alternative Energy Course Development for a Technology Program. *Technology Interface International Journal (TIIJ)*. Vol. 12, No. 1. ISSN# 1523-9926. Fall/Winter 2011.
10. **Yildiz F.** 2011. Energy Harvesting with Piezoelectric Fiber Composite from Mechanical Vibrations. *The International Journal of Modern Engineering (IJME)*. Vol. 11, No. 2. Print ISSN# 2157-8052, Online ISSN# 1930-6628. Spring/Summer 2011.
11. **Yildiz F.** 2011. Energy Harvesting from Passive Human Power. *Journal of Applied Science & Engineering Technology (JASET)*. ISSN# 1933-0421, Vol. 4.
12. **Yildiz F.**, Pecen R., Zora A. 2010. Utilizing Advanced Software Tools in Engineering and Industrial Technology Curriculum. *International Journal of Engineering Research and Innovation (IJERI)*. Vol. 2, No. 1. Print ISSN# 2152-4157, Online ISSN# 2152-4165. Spring/Summer 2010.

13. **Yildiz F.** 2010. Low Power Self-Sufficient Wireless Camera System. *The International Journal of Modern Engineering (IJME)*. Vol. 10, No.2. Print ISSN# 2157-8052, Online ISSN# 1930-6628, Spring/Summer 2010.
14. **Yildiz F.**, Fazarro D., Coogler K. 2010. The Green Approach: Self-Powered House Design Concept for Undergraduate Research. *Journal of Industrial Technology (JIT)*. Vol. 26 No.2. April 2010 through June 2010.
15. **Yildiz F.** 2010. Low Power Energy Harvesting From Hydraulic Door Closer. *Journal of Engineering Technology (JET)*. Vol.27, No.1. ISSN# 0747-9664. Spring 2010.
16. **Yildiz F.** 2009. Potential Ambient Energy Harvesting Sources and Energy Harvesting Techniques. *Journal of Technology Studies (JOTS), Epsilon Pi Tau (EPT)*. Vol. XXXV No. 2. ISSN#: 1071-6084. Fall 2009.
17. **Yildiz F.**, Fahmy M. F. 2009. Self-Powered Fitness Equipment. *The Technology Interface Journal*. Vol.10 No.1. ISSN# 1523-9926. Fall, 2009.

Peer Reviewed Conference Publications – Presented at the Conferences

1. **Yildiz F.** 2014. *Parking and Street Lighting with Solar and Wind Energy Powered Retrofitted LED Lights*. Proceedings of 4th IAJC/ISAM Joint International Conference, September 25-27, 2014. Orlando, FL.
2. **Yildiz, F.**, Coogler, K.L., 2014. *Design and Implementation of a 1kW Photovoltaic System as a Training Infrastructure*. Proceedings of 2014 American Society for Engineering Education (ASEE) Annual Conference, June 2014, Indianapolis, IN.
3. **Yildiz, F.**, Coogler, K.L., 2014. *Low Power Energy Harvesting with a Thermoelectric Generator through an Air Conditioning Condenser*. Proceedings of 2014 American Society for Engineering Education (ASEE) Annual Conference, June 2014, Indianapolis, IN.
4. **Yildiz, F.** 2013. *Attracting Young Minds to Engineering Technology Fields with Mobile Renewable Energy Education*”, Proceedings of the ASEE Fall 2013 Middle Atlantic Section Conference, University of District Colombia, October 11-12, 2013, Washington, DC.
5. Atharifar, H. **Yildiz, F.**, Knapp R. J. 2013. *Survey of the Current Academic and Industrial Trends in Utilizing the CADD Technology*. Proceedings of 2013 American Society for Engineering Education (ASEE) Annual Conference and Exposition, June 23-26, 2013, Atlanta, GA.
6. **Yildiz, F.** 2013. *A Project Based Microcontroller Course*. Proceedings of 2013 American Society for Engineering Education (ASEE) Annual Conference and Exposition, June 23-26, 2013, Atlanta, GA.

7. **Yildiz, F.** 2013. *An Applied Comparison Study: Solar Energy vs. Thermoelectric Energy*. Proceedings of 2013 American Society for Engineering Education (ASEE) Annual Conference and Exposition, June 23-26, 2013, Atlanta, GA.
8. Pecen, R., **Yildiz, F.**, Yuksek, B.Z., Dakeev, U., Baltaci, K. 2012. *Design and Implementation of a 10kW Wind Power and Instrumentation System*. Proceedings of 2012 American Society for Engineering Education (ASEE) Annual Conference, June 2012, San Antonio, TX.
9. Pecen, R., Eichelberger, C.E., **Yildiz, F.** 2013. *An Undergraduate Summer Research Experience on Energy Efficient Lighting Technologies and Harmonics*. Proceedings of 2012 American Society for Engineering Education (ASEE) Annual Conference, June 2012, San Antonio, TX.
10. **Yildiz, F.**, Coogler, L. K., Pecen, R. 2012. *An Overview: Applied Interdisciplinary Renewable Energy Projects*. Proceedings of 2012 American Society for Engineering Education (ASEE) Annual Conference, June 2012, San Antonio, TX.
11. **Yildiz, F.**, Coogler, K.L., 2012. *Indoor Security Lighting with Solar Powered LED Technology*. Proceedings of 2012 American Society for Engineering Education (ASEE) Annual Conference, June 2012, San Antonio, TX.
12. **Yildiz, F.**, Coogler, K.L., Muns, C.N. 2011. *Two Successful Projects: Solar Air and Solar Water Heating Training Units*. Proceedings of 2011 The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: ReThinking the Future, November 9-12 2011, Cleveland, OH.
13. **Yildiz F.**, Coogler K.L., Zora, A. 2011. *An Undergraduate Research Project: The Design and Development of an Environment Friendly Hybrid Boat*. Proceedings of 2011 American Society for Engineering Education (ASEE) Annual Conference, June 2011, Vancouver, BC, Canada.
14. Karayaka H.B., **Yildiz, F.**, Mehrubeoglu, R., Caruso, K., 2011. *A Nuclear Power Industry Career Development Workshop for High School Teachers in a Hispanic Serving Institution*. Proceedings of 2011 American Society for Engineering Education (ASEE) Annual Conference, June 2011, Vancouver, BC, Canada.
15. **Yildiz, F.**, Muns, N.C., Coogler, K.L. 2011. *A General Alternative Energy Course Development for a Technology Program*. Proceedings of 2011 IAJC-ASEE International Joint Conference on Engineering and Related Technology, April 2011, Hartford, CT.
16. **Yildiz, F.**, Baltaci, K. 2011. *Challenges of EVs and HVs to the US Electrical Power Grid*. Proceedings of 2011 IAJC-ASEE International Joint Annual Conference on Engineering and Related Technology, April 2011, Hartford, CT.
17. **Yildiz F.**, Kingman, D., Coogler, K.L., Karayaka, H.B. 2011. *Recruitment of K-12 Students to Engineering Technology Programs through Applied Alternative Energy Education Workshops*. Proceedings of 2011 ASEE Gulf Southwest Annual Conference:

Innovating Engineering and Engineering Technology Education, ASEE Gulf-Southwest Section, March 2011, Houston, TX.

18. **Yildiz F.**, Coogler K.L. 2010. *Development of a Renewable Energy Course for a Technology Program*. Proceedings of 2010 American Society for Engineering Education (ASEE) Annual Conference, June 2010, Louisville, Kentucky.
19. **Yildiz F.**, Coogler K.L. 2010. *Students Built Educational Renewable Energy Training Units*. Proceedings of 2010 American Society for Engineering Education (ASEE) Annual Conference, June 2010, Louisville, Kentucky.
20. **Yildiz F.** 2010. *A New Approach: Using Electronics Laboratory More Efficiently and Safely*. Proceedings of 2010 American Society for Engineering Education (ASEE), June 2010, Louisville, Kentucky.
21. **Yildiz F.**, Dearing, M. 2010. *Self-Powered Athletics Field Striping Machine*. Proceedings of 2010 ASEE - Gulf Southwest Annual Conference: Bridge to Industry – Educating the Industry Bound Engineer and Technologist, ASEE Gulf-Southwest Section, March 2010, Lake Charles, LA.
22. **Yildiz F.** 2010. *Building Tomorrow: A Study of Renewable Energy Students Built Renewable Energy Training Unit*. Proceedings of 2010 Gulf Southwest Annual Conference: Bridge to Industry – Educating the Industry Bound Engineer and Technologist, ASEE Gulf-Southwest Section, March 2010, Lake Charles, LA.
23. **Yildiz F.**, Freitas M. 2009. *Energy Harvesting and Storage Techniques from Ambient Energy Sources*. Proceedings of 2009 The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Emerging & Green Technologies for Today's Economic Challenges, November 2009, Louisville, Kentucky.
24. Baltaci K., **Yildiz F.** 2009. *NI LabView Data Acquisition System Design using Hydrogen Fuel Cell*. 3rd Institute of Electrical and Electronics Engineers (IEEE) International Conference on Application of Information and Communication Technologies (ICAICT 2009). Page(s): 1-6, ISBN# 978-1-4244-4739-8. DOI# 10.1109/ICAICT.2009.5372578. October 4-16, 2009, Baku, Azerbaijan.
25. **Yildiz F.** 2009. *Self-Powered Wireless Camera System Design*. Proceedings of 2009 American Society for Engineering Education (ASEE) Annual Conference. June 2009, Austin, TX.
26. **Yildiz F.**, Coogler K.L., Fazarro D. 2009. *Self Sufficient Energy Efficient House Design*. Proceedings of 2009 American Society for Engineering Education (ASEE) Annual conference, June 2009, Austin, TX.
27. **Yildiz F.**, Zora A. 2009. *Using One Dimensional Software Tools in Low Power Ambient Energy Harvesting and Generation Simulations*. Proceedings of 2009 American Society for Engineering Education (ASEE) Annual Conference, June 2009, Austin, TX.

28. Fidan I., **Yildiz F.**, Bahadir M.E. 2009. *Remote Laboratory Collaboration*. Proceedings of 2009 American Society for Engineering Education (ASEE) Annual Conference, June 2009, Austin, TX.
29. **Yildiz F.** 2009. *Low Power Ambient Energy Harvesting and Conversion and Storage Circuits*. 2009 Sixth International Conference on Information Technology: New Generations (ITNG 2009). Proceedings of IEEE's (Institute of Electrical and Electronics Engineers) Computer Society, Circuit and System Design Track. ISBN#: 978-0-7695-3596-8. Pages. 35-40. April 2009, Las Vegas, NV.
30. Pecen R., **Yildiz F.**, Baltaci K. 2008. *Design and Implementation of a Hydrogen Fuel Cell Data Acquisition and Monitoring Scheme for Educational Institutions*. Proceedings of 2008 American Society for Engineering Education Annual Conference, June 2008, Pittsburgh, PA.
31. Pecen R., Zora A., **Yildiz F.** 2008. Utilizing Advanced Software Tools for Engineering Technology Curriculum as a Bridge Between Academia and Industry. Proceedings of 2008 American Society for Engineering Education Annual Conference, June 2008, Pittsburgh, PA.
32. **Yildiz F.**, Zhu J., Pecen R. 2007. *Techniques of Harvesting Ambient Energy Sources & Energy Scavenging Experiments, Design and Implement an Energy Harvesting Device*. Proceedings of 2007, National Association of Industrial Technology (NAIT) Annual Conference, October 2007, Florida.
33. **Yildiz F.**, Pecen R., Baltaci K. 2007. *A Lab View PDS v8.20 Based Novel DATA Acquisition and Interface Module for a 500 W Hydrogen Fuel-Cell Power Station Unit*. Proceedings of 2007, National Association of Industrial Technology (NAIT) Annual Conference, October 2007, Florida.
34. **Yildiz F.**, Zhu J., Pecen R., Guo L. 2007. *Energy Scavenging for Wireless Sensor Nodes with a Focus on Rotation to Electricity Conversion*. Proceedings of 2007 American Society for Engineering Education (ASEE) Annual Conference, June 2007, Honolulu, Hawaii.
35. Pecen R., **Yildiz F.**, Baltaci K. 2007. *Development of a DATA Acquisition and Interface Module for a 500 W Hydrogen Fuel-Cell Power Station using LabView™ PDS v8.20*. Proceedings of 2007, International Hydrogen Energy Congress and Exhibition (IHEC 2007), July 2007, Istanbul, Turkey.
36. **Yildiz F.**, Zhu J. 2006. *Applications of Wireless Sensor Networks in Industrial Environments*. Proceedings of 2006, National Association of Industrial Technology (NAIT) Annual Conference, October 2006, Cleveland, Ohio.

Peer Reviewed Abstracts – Presented at the Conferences

1. Goksu, M., **Yildiz, F.** 2014. *Modeling for More Efficient Wind Turbine*. The Association of Technology, Management, and Applied Engineering (ATMAE) 2014 Annual Conference: Tomorrow's Gateway. November 19-22, 2014. St. Louis, Missouri.

2. **Yildiz, F.** 2014. *Design and Implementation of 2kW Hybrid Photovoltaic and Wind Energy Laboratory and Training System for Renewable Energy Classes and Research*. The Association of Technology, Management, and Applied Engineering (ATMAE) 2014 Annual Conference: Tomorrow's Gateway. November 19-22, 2014. St. Louis, Missouri.
3. Ullrich, D., **Yildiz, F.**, Kane, S. (2014). "Agricultural Sustainable Energy Education Network (ASEEN) – Teaching Alternative Energy Topics", Poster/Workshop. 2014 VATAT Professional Development Conference: Generate Success. July 28-August 1, 2014. Abilene, TX.
4. **Yildiz F.** 2014. *Energy Harvesting with Piezoelectric Devices through an Air Conditioning Condenser*. International Conference on Industry, Engineering, and Management Systems (IEMS 2014) Annual Conference, March 24-26, 2014. Cocoa Beach, FL.
5. **Yildiz F.** 2014. *Design and Implementation of a 1kW Wind Power Training System*. International Conference on Industry, Engineering, and Management Systems (IEMS 2014) Annual Conference, March 24-26, 2014. Cocoa Beach, FL.
6. **Yildiz, F.** 2013. *Low-Cost and Portable Mini-Lab Development for Green Energy Education Activities*, The Association of Technology, Management, and Applied Engineering (ATMAE) 2013 Annual Conference: Developing the Future Workforce. November 20-23, 2013. New Orleans, Louisiana.
7. Goksu, M., **Yildiz, F.** 2013. "Simulation of Wind Turbines", The Association of Technology, Management, and Applied Engineering (ATMAE) 2013 Annual Conference: Developing the Future Workforce. November 20-23, 2013. New Orleans, Louisiana.
8. **Yildiz, F.** 2013. "Learn How to Build Affordable Renewable Energy Training Equipment and Prepare Curriculum", 2013 High Impact Technology Exchange Conference (HI-TEC): Education America's Technical Workforce. July 21-24 2013. Austin, TX.
9. Ullrich, D., **Yildiz, F.**, Lane, B., Kane, S. (2013). "Agricultural Sustainable Energy Education Network (ASEEN)", Poster. 2013 VATAT Professional Development Conference: Agricultural Education by the Bay. July 29-August 2, 2013. Corpus Christi, TX.
10. **Yildiz F.**, Coogler, K.L., Kuzmar S. A. 2013. "Building Affordable Equipment to Conduct Experiments for Alternative Energy Courses", International Conference on Industry, Engineering, and Management Systems (IEMS 2013) Annual Conference, March 24-27, 2013. Cocoa Beach, FL.
11. Kuzmar S. A., **Yildiz F.**, Crockford, W.W., Manjahy, F. 2013. "Potential Use of New Technologies to Improve Highway Safety", International Conference on Industry, Engineering, and Management Systems (IEMS 2013) Annual Conference, March 24-27, 2013. Cocoa Beach, FL.
12. Atharifar, H., **Yildiz, F.**, Knapp R. J. 2012. "Learners Development of Spatial Visualization in a 2D versus 3D CAD Class", The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Strengthening Our Connections. November 14-17, 2012. Nashville, TN.

13. **Yildiz, F.**, Coogler, K.L., Crockford, W.W. 2012. “*Energy Harvesting from an Air Conditioning Condenser Exhaust*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Strengthening Our Connections. November 14-17, 2012. Nashville, TN.
14. **Yildiz, F.**, Coogler, K.L. 2012. “*Energy Efficient LED Lighting Powered by Hybrid Wind and Solar Power*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Strengthening Our Connections. November 14-17, 2012. Nashville, TN.
15. **Yildiz, F.**, Baltaci, K., Goksu, M. 2012. “*Overview of Hybrid Electric Vehicle Technology*”, Energypath 2012 Annual Conference funded by Sustainable Energy Fund. June 25-29 2012. DE SALES University, Center Valley, PA.
16. **Yildiz F.**, Kuzmar S. A. 2012. “*Self-Sufficient Energy-Efficient Residential and Commercial Building Design Aspects*”, International Conference on Industry, Engineering, and Management Systems (IEMS 2012), March 2012. Cocoa Beach, FL.
17. **Yildiz F.** 2012. “*Environment Friendly Electric Boat Design and Development*”, International Conference on Industry, Engineering, and Management Systems (IEMS 2012), March 2012. Cocoa Beach, FL.
18. Kuzmar, S. A., **Yildiz F.** 2012. “*Interaction Between Engineers and Construction Managers*”, International Conference on Industry, Engineering, and Management Systems (IEMS 2012), March 2012. Cocoa Beach, FL.
19. **Yildiz F.** 2012. “*A Comparison Study: The Reliability and Viability of Potential Sustainable Energy Systems*”, 2012 ASEE Gulf Southwest Annual Conference, ASEE Gulf-Southwest Section, April 2012. El Paso, TX.
20. **Yildiz F.** 2012. “*Promotion of STEM Education in K-12 System with Alternative Energy Workshops*”, 2012 ASEE Gulf Southwest Annual Conference, ASEE Gulf-Southwest Section, April 2012. El Paso, TX.
21. **Yildiz F.** 2012. “*Self-Sufficient Energy-Efficient House Design*”, 2012 ASEE Gulf Southwest Annual Conference, ASEE Gulf-Southwest Section, April 2012. El Paso, TX.
22. **Yildiz F.** 2012. “*High Performance and Driver-Friendly Electric Vehicle Technology*”, 2012 ASEE Gulf Southwest Section Annual Conference, April 2012. El Paso, TX.
23. Oncul, F., **Yildiz, F.** 2011. “*Facilitate Learning by Video Capturing Your Lectures with Free Software Tools*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
24. Nedom, N.C., **Yildiz, F.** 2011. “*Develop a Safety Program for Your Classroom On How to Liability-Proof Your Self in A Lawsuit*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.

25. Baltaci, K., **Yildiz, F.** 2011. “*Design and Simulation of Electric Motor Control Unit for Dual Engine Hybrid Tractor*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
26. **Yildiz, F.** 2011. “*A Small Scale Prototype Wind Turbine Design and Development*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
27. **Yildiz, F.**, Coogler, K.L. 2011. “*Two Successful Student Projects: Solar Air and Solar Water Heating Training Units*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
28. **Yildiz, F.** 2011. “*The Current Map and Future of Alternative Energy Degrees*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
29. Kuzmar, A., **Yildiz, F.**, Freitas, V. M. 2011. “*Design in Construction Management*”, The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Rethinking the Future. November 9-12, 2011. Cleveland, OH.
30. Pecen, R., **Yildiz F.** 2010. “*Development of Two New Courses on Wind Energy and Its Management*”. The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Bridging the Gulf. October 2010. Panama City Beach, FL.
31. **Yildiz F.**, Coogler, K.L. 2010. “*Establishing a Renewable Energy Laboratory and its Data Acquisitions System*”. The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Bridging the Gulf. October 2010. Panama City Beach, FL.
32. Pecen, R., **Yildiz F.** 2010. “*How to Establish a Solar Electric Boat Development Program as a STEM Application for Academic Institutions*”. The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Bridging the Gulf. October 2010. Panama City Beach, FL.
33. **Yildiz F.** 2010. “*A Quick Game to Learn Importance of Freehand Sketching Techniques*”. The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Bridging the Gulf. October 2010. Panama City Beach, FL.
34. **Yildiz F.**, Coogler, K.L. 2010. “*The Development and Implementation of Solar, Wind, and Human Power Mini-lab as a Training Unit*”. The Association of Technology, Management, and Applied Engineering (ATMAE) Annual Conference: Bridging the Gulf. October 2010. Panama City Beach, FL.

35. **Yildiz, F.**, Goksu, M. 2010. “*Mini-Lab: Building an Affordable Renewable Energy Training Unit*”. The Association of Technology Management and Applied Engineering (ATMAE) Annual Conference, October 2010. Panama City Beach, FL.
36. **Yildiz, F.** 2009. “*One Dimensional Analytical Simulation Software Tools in Renewable Energy Harvesting Simulations*”. The Association of Technology Management and Applied Engineering (ATMAE) Annual Conference: Emerging & Green Technologies for Today's Economic Challenges, October 2009. Louisville, KY.
37. **Yildiz, F.** Oncul, F. 2009. “*Web-Based Homework Assignment and Assessment Tool with Individual Performance Report Generation*”. The Association of Technology Management and Applied Engineering (ATMAE) Annual Conference: Emerging & Green Technologies for Today's Economic Challenges, October 2009. Louisville, KY.

Funded Grants

- Stutts, K. J., M. M. Beverly and **F. Yildiz**. 2014. Governor’s Summer Merit Program. Texas Workforce Commission. **Submitted**.
Total Requested: \$57,583
- Lucia, J.L., M.M. Beverly, **F. Yildiz**, and M.J. Anderson. Development of an Equine Non-contact Thermography Device. Sam Houston State University (SHSU), Enhancement Research Grant. Total Funded: \$11,674.00
- **Yildiz, F.** 2014. Solar Instructor Training Network, South-Central Region. U.S. Department of Energy. DE-EE0005680. Funded amount excludes: Free training from training provider (Solar Power People), follow up training and consultative services.
Total Funded: \$5600
- **Yildiz, F.** 2014. Solar Instructor Training Network, South-Central Region. U.S. Department of Energy. DE-EE0005680. Funded amount excludes: Free training from training provider (Solar Power People), follow up training and consultative services.
Total Funded: \$1585
- Wolfskill, L. A., Ullrich, D. R., **Yildiz, F.** 2013-14. *TXARNG Facility Energy Auditing Program. Texas Military Forces (TXMF) CFMO401-4-1298*. Contract for energy audit of military facility (pilot program), with more facilities to be programmed in CY2014 after successful completion this first one. Includes student training and learning outcomes for 2-6 undergraduate students. **\$3,793.00** from contract, plus **\$10,616** of new equipment for the department.
Total Funded: \$14,409
- **Yildiz, F.** 2013. Solar Instructor Training Network, South-Central Region. U.S. Department of Energy. DE-EE0005680. Funded amount excludes: Free training from training provider (Ontility), follow up training and consultative services.
Total Funded: \$2400
- Stutts, K.J, Beverly M.M, **Yildiz, F.** 2013. Texas Workforce Commission. “*Summer Merit Program – SHSU STEM Camp*”.
Total Funded: \$70,742

- **Yildiz, F.** 2012. Solar Instructor Training Network, South-Central Region. U.S. Department of Energy. DE-EE0005680. Funded amount excludes: Free training from training provider (Ontility), follow up training and consultative services.
Total Funded: \$4603
- Ullrich, D., Lane, B., **Yildiz, F.** 2012. United States Department of Agriculture (USDA), Capacity Building Grants for Non-Land Grant Colleges of Agriculture through National Institute of Food and Agriculture (NIFA), to establish “*Agriculture Sustainable Energy Education Network (ASEEN)*”, NIFA: 2012-03737-GRANT11179387, Award Number: 2012-70001-20142.
Total funded: \$693,021
- **Yildiz, F.**, Crockford W. 2011. Entergy Inc. – Charitable Foundation, to Support “*Promotion of Science and Energy Education in K-12 Rural Schools*”.
Total funded: \$15,000
- **Yildiz, F.** 2010. Fleishman Hillard Inc., to Support “*Promotion of Alternative Energy Education Workshops in K-12 Schools*”.
Total Funded: \$1500.61
- **Yildiz, F.** 2009. Enhancement Grant for Research 2010 of Sam Houston State University to Support “*Building An Interactive Mini-Lab Training Unit to Promote Alternative Energy*”.
Total Funded: \$13,500
- **Yildiz, F.**, Kingman D. 2009. Entergy Inc. Charitable Foundation, to Support “*Promotion of Alternative Energy Education in K-12 Schools*”.
Total Funded: \$15,000
- **Yildiz, F.** 2009. SHSU-Office of Research and Special Programs to Support “*Alternative Energy Education Course Curriculum and Equipment Purchase*”.
Total Funded: \$5817.09
- **Yildiz, F.** 2009. SHSU-College of Art & Sciences to Support “*Alternative Energy Education Course Curriculum and Equipment Purchase*”.
Total Funded: \$1174.05
- **Yildiz, F.** 2009. SHSU-Graduate School to Support “*Alternative Energy Education on Campus*”.
Total Funded: \$13,465.87

Non-Funded Grants

- **Yildiz, F.**, Foster, A., Morin, E., Shannon, L.J., Miller, S. 2013-2014. Discovery Research K-12 (DR K-12 – NSF 13-601), National Science Foundation (NSF) to support “*RUI: Promoting and Accelerating Science Education through Interactive Teaching*”.
Total Requested: \$447,360
- **Yildiz, F.**, Ullrich, D., Crockford, W.W. 2013. Texas State Energy Conservation Office, Innovative Energy Demonstration Program RFA No. IED-G1-2013, “*Installation of 40kW Photovoltaic System at Sam Houston State University*”.

Total Requested: \$178,699

- Hudec, C., **Yildiz, F.**, Kuzmar, A., Crockford, W. 2012. Texas Department of Transportation, Collaborating with Texas Transportation Institute (TTI) “*Evaluation of Existing Smartphone Application and Data Needs for Travel Surveys*”.
Total Requested: \$114,150
- **Yildiz, F.** 2012. Entergy Inc. – Charitable Foundation, to Support “*Promotion of STEM (Science, Technology, Engineering, and Math) Education Through Renewable Energy Workshops in Rural School Districts*”.
Total Requested: \$41,147
- **Yildiz, F.**, Crockford W., Aung, K., Karayaka, H.B. 2011. NSF-Research Experience for Undergraduates (REU), “*Collaborative: RUI: REU Site-Research Opportunities for Undergraduates in Renewable Energy Systems*”.
Total Requested: \$304,334
- **Yildiz, F.** 2011. Texas SECO-Renewable Energy & Energy Conservation Events, “*Sustainable Energy Conference*”.
Total Requested: \$24,992
- **Yildiz, F.**, Salles, D., Shannon, L.J. 2011. Discovery Research K-12 (DR K-12), National Science Foundation (NSF) to support “*RUI: Promoting STEM Education Through Renewable Energy Systems using Web 2.0. Interactive Platform*”.
Total Requested: \$447,904
- **Yildiz, F.**, Kingman, D., Muller, J., Coogler, K. 2011. Texas State Energy Conservation Office (Renewable Energy Technology Grants SEP Program 2.1), to Support “*Installation of 4.2kW Photovoltaic System at Sam Houston State University*”.
Total Requested: \$85,000
- **Yildiz, F.** 2010. Enhancement Research Grant for Research 2011 of Sam Houston State University to Support “*A New Automated Utility Data Collection and Management System*”.
Total Requested: \$15,000
- **Yildiz, F.** 2010. Marathon Oil, to Support “*Alternative Energy Educational Workshops to Promote Renewable Energy Education in K-12 Schools*”.
Total Requested: \$35,000.
- **Yildiz, F.** 2009. NEA (National Education Association) Foundation, to Support “*Promotion of Alternative Energy Education in K-12 Schools*”.
Total Requested: \$5000
- **Yildiz, F.**, Benhaddou, D. 2009. Shell U.S., to Support “*Promotion of Alternative Energy Education in K-12 Schools-STEM*”.
Total Requested: \$76,000

- **Yildiz, F.**, Karayaka, B. H., & Aung, K. 2009. Norman Hackerman Advanced Research Program (Texas ARP) to Support “*Measurement, Evaluation, and Comparison of Sustainable Energy Resources with a Mobile Research Lab*”.
Total Requested: \$200,000
- Bendaddou, D., Korkmaz T., & **Yildiz F.** 2009. Norman Hackerman Advanced Research Program (Texas ARP) to Support “*Developing a Remote Health Monitoring System Using Wireless Sensor Networks*”.
Total Requested: \$200,000
- Fazarro, D., Hebert, J., Ullrich, D., **Yildiz, F.**, Hynes, J., Burgess, M., Kingman, D., Lau, M. 2009. HP HIED Technology Grant, “*Incorporating HP Technology in Diffusion Lateral Learning Systems for the Proposed Integrated Engineering Program at SHSU*”.
Total Requested: \$240,000
- **Yildiz, F.**, Coogler K., Dominick, F. 2009. SHSU-ORSP (Faculty Enhancement Grant for Research) to Support “*Self Sufficient Energy Efficient House Construction*”.
Total Requested: \$18,000

Gift-In-Kind Donations

- Ten Electric Meters. **\$500**. Entergy Incorporated.
- Miniature shaker with integrated amplifier with BNC input, 31 N (7 lbf) pk sine force, 13 mm (0.5") pk-pk stroke. **\$2631**. The Modal Shop.
- DL WIND-A1, Wind Energy Trainer with Drive Motor. **\$9200**. De Lorenzo USA, LLC.
- LDS Vibrator/Shaker, V203, 10/32 UNF. **\$150**. Bruel & Kjaer North America, Inc.
- Photovoltaic Lab Kit. Brand New Laboratory/Research Equipment to teach Solar Photovoltaic Systems. **\$2737**. Houston Community College, Solar Instructor Training Network, South-Central Region. U.S. Department of Energy. DE-EE0005680.
- PIC Training System Kit (2 Units). Microcontroller in Embedded System Designs. **\$500**. NSF TUES DUE Type 2 Project Award.
- Honeywell Flowmeter. **\$105**. Item Control Number: 89640421980007. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Power Supply. **\$500**. Item Control Number: 89640421980007. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Digital Temperature Indicator. **\$750**. Item Control Number: 89363721870011A. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Multi Meters. **\$8720**. Item Control Number: 89363721870018A. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Oscilloscope-Storage. **\$12,696**. Item Control Number: 89910122072108. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).

- Oscilloscope. **\$6481.30**. Item Control Number: 89910122072107. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Oscillator Sweep. **\$4975**. Item Control Number: 89640421980002. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Meter. **\$100**. Item Control Number: 89640421980020. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Portable Oscilloscope. **\$1981**. Item Control Number: 89640421980038. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Oscilloscope. **\$2420**. Item Control Number: 89640421980048. Energy Related Laboratory Equipment (ERLE), The Laboratory Equipment Donation Program (LEDP). Department of Energy (DOE).
- Textronix Inc Camera Oscilloscope, Item Control Number: 89514112340023. **\$500** from Fermi National Accelerator Laboratory, ERLE program of Department of Energy (September 2011).
- Digilent Analog Discovery Kit with Analog Parts including ADI samples. **\$219**. Digilent Inc.
- DE2-115 FPGA Development Kit. **\$299**. Terasic Technologies Inc. Altera University Program.
- ASLKPRO University Kit. Analog System Lab Kit PRO. (11 Units). **\$1089**. Texas Instruments.
- Texas Instruments TI C2000 Microcontroller Development Tools Starter Kit. **\$345**.
- Microchip MX PIC24 Module and MX Educational Target Board. **\$165**. Microchip.
- Digilent Nexys 2 Spartan-3E FPGA Board. **\$149** from Xilinx and Digilent Inc., (May 2011).
- Digilent Cerebot 32MX4 Kit. **\$84** from Xilinx and Digilent Inc., (May 2011).
- Basys™2 Spartan-3E FPGA Board (5 Units) with 25 seats software license, Spartan 3E Starter Board (5 Units) with 25 seat software license. **\$3238** from Xilinx and Digilent Inc., (August 2011).
- TCR Series DC Power Supply (80V-150A DC), TCR 80T150-4-0731, Item Control Number: 89514111660017. **\$5045** from Fermi National Accelerator Laboratory, ERLE program of Department of Energy (July 2011).
- CY8CKIT-014 PSoC® 5 FirstTouch™ Starter Kit (3 Units), CY3268 PowerPSoC Lighting Starter Kit (3 units), CY3675-CLKMAKER1 CyClockMaker Clock Programming Kit (3Units), CY8CKIT-001 PSoC Development Kit (3 Units), and CY3280-MBR-Capsense Express Kit with Smart Sense Auto Tuning (3 Units). **\$2080.47** from Cypress Semiconductor (June 2011).
- Energy Transfer Generator, Part Number: ET-8771A. **\$159** from Pasco Scientific (May 2011).
- Mercury Long Shaft Extension Kit, Serial Number: 6443973, Part Number: 100226. **\$300** from Bay Manufacturing (May 2011).
- Equipment and Books (To conduct a RE workshop at a National conference, The Association of Technology, Management, and Applied Engineering –ATMAE, October 2010). **\$3640** from
 - CD Solar Technology: 5W solar modules. (20 units - **\$800**)
 - Photovoltaic Systems, 2nd edition, American Technical Publisher. (20 books - **\$2000**)
 - Southwest Wind: Solar Powered Mini-Skystream Wind Turbines (20 units- **\$640**)
 - Morningstar: SunSaver Charge Controllers (6 units - **\$200**)
- Pursuit 2000 S2 Yacht with V6 VRD Outboard Motor. **\$5000** from a Private Party. (For Student Research Projects: Converting a Gasoline Powered Boat to Hybrid Electric Boat. (June 2010).
- BP4175 (5 Units) and BP4170 (2 Units) 24V 175W and 170W Solar Modules. **\$5,600** from British Petroleum Solar -BP Solar (December 2009).

None Peer Reviewed Abstracts/Posters, Presentations, Seminars, Workshops Offered

- *3D Computer Aided Design and Rapid Prototyping* for 28 High School Students, (6 hours). ExCEL@Sam – Exploring College Education and Life at Sam Houston State University. October 15, 2014. Huntsville, TX.
- *Computer Aided Design (3-D Modeling)* for 38 High School Students, (6 hours). ExCEL@Sam – Exploring College Education and Life at Sam Houston State University. February 26, 2014. Huntsville, TX.
- *Fundamentals of Electronics*, ASEEN Project Summer Workshops, Sam Houston State University. Agriculture and Science Teachers, (2 hours). June 10, 2014. Huntsville, TX.
- *Solar Photovoltaic Technology Activities*, ASEEN Project Summer Workshops, Sam Houston State University. Agriculture and Science Teachers, (4 hours). June 10, 2014. Huntsville, TX.
- *Wind Energy Technology*, ASEEN Project Summer Workshops, Sam Houston State University. Agriculture and Science Teachers, (3 hours). June 20, 2013. Huntsville, TX.
- *Solar Photovoltaic Technology*, ASEEN Project Summer Workshops, Sam Houston State University. Agriculture and Science Teachers, (2 hours). June 18, 2013. Huntsville, TX.
- *Introduction to Renewable Energy and Electronic*, ASEEN Project Summer Workshops, Sam Houston State University. Agriculture and Science Teachers, (2 hours). June 17, 2013. Huntsville, TX.
- *Renewable Energy Technology*, SHSU STEM Summer Camp, Sam Houston State University, 15 High School Students, (4 hours). June 12, 2013. Huntsville, TX.
- *Renewable Energy Technology*, SHSU STEM Summer Camp, Sam Houston State University, 15 High School Students, (4 hours). June 11, 2013. Huntsville, TX.
- *Renewable Energy Technology and Energy Conservation*, 46 Students, (4 hours). May 2, 2013. Willis ISD, TX.
- *Fueling The Future*, Speaker and Discussion Leader invited by SHSU Honors College. Let's Talk Event at Sam Houston State University, (3 Hours). March 21, 2013.
- *Alternative Energy Technology and Applications*, 30 Palacios ISD Middle and High School Students, (3 hours), February 22, 2013. SHSU Campus, Huntsville, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Conroe ISD, High School Students, (8 hours), May 16, 2012. Conroe ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Huntsville ISD, High School Students, (4 hours), November 27, 2012. Huntsville ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Coldspring ISD, High School Students, (8 hours), April 26, 2012. Coldspring-Oakhurst ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Coldspring ISD, High School Students, (8 hours), April 27, 2012. Coldspring-Oakhurst ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Centerville ISD, High School Students, (8 hours), December 13, 2012. Centerville ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Centerville ISD, Middle School Students, (1 hour), December 13, 2012. Centerville ISD, TX.

- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Groveton ISD, High School Students, (8 hours), December 6, 2012. Groveton ISD, TX.
- *Promotion of Alternative Energy Education: Reengineering Energy Education with Alternative Energy Applications*, Coldspring ISD, High School Students, (8 hours), October 19, 2012. Coldspring-Oakhurst ISD, TX.
- *Mini-Lab: Building an Affordable Renewable Energy Training Unit*, 2010 The Association of Technology, Management and Applied Engineering (ATMAE) Annual Conference, 20 College Professors, (4 hours), October 2010. Panama City, FL.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Conroe ISD, Science and Technology Teachers, Duration: 8 hours, Participants: 22 STEM Teachers, May 2010, Conroe ISD, Conroe, TX.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Boys and Girls Club of Walker County Students, Duration: 8 hours, Participants: 16 Students, June 2010, SHSU Campus, Huntsville, TX.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Boys and Girls Club of Walker County Students, Duration: 8 hours, Participants: 22 Students October 2010, SHSU Campus, Huntsville, TX.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Huntsville ISD, T-STEM Academy Students, Duration: 8 hours, Participants: 22 Students, October 2010, SHSU Campus.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Boys and Girls Club of Walker County Students, October 2010, SHSU Campus, Huntsville TX.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Boys and Girls Club of Walker County Students, June 2010, SHSU Campus, Huntsville, TX.
- *Promotion of Alternative Energy Education Workshops 2010: Reengineering Energy Education with Alternative Energy Applications*, Conroe ISD, Science and Technology Teachers, May 2010, Conroe ISD Campus, Conroe TX.
- **Yildiz F.**, Crumrine C., Chelf M. (Poster). “Alternative Energy Training Unit”. The Fourth Annual SHSU Undergraduate Research Symposium, April 16, 2011. Sam Houston State University.
- Johnston D., **Yildiz F.** (Abstract/Presentation). “Building an Alternative Energy Training Unit”. The Third Annual SHSU Undergraduate Research Symposium, April 24, 2010. Sam Houston State University.
- Wagner C., **Yildiz F.** (Abstract/Presentation). “Building a Prototype Wind Turbine”. The Third Annual SHSU Undergraduate Research Symposium, April 24, 2010. Sam Houston State University.
- **Yildiz, F.**, (Poster). “*Self-Sufficient Energy Efficient House Design and Construction*”. Student and Faculty Research Posters. Centennial Celebration of Agricultural and Industrial Sciences Department. September 26, 2009, SHSU Gibbs Range, Huntsville, TX.
- **Yildiz, F.**, Parker, K. (Poster). “*Establishing Renewable Energy Laboratory and Education*”. Student and Faculty Research Posters. Centennial Celebration of

Agricultural and Industrial Sciences Department. September 26, 2009, SHSU Gibbs Range, Huntsville, TX.

- **Yildiz, F.**, Dearing, M. (Poster). “*Converting a Battery-Powered Field Paint Machine to a Self- Powered Paint Machine Using Passive Human Power*”. Student and Faculty Research Posters. Centennial Celebration of Agricultural and Industrial Sciences Department. September 26, 2009, SHSU Gibbs Range, Huntsville, TX.
- **Yildiz, F.**, (Poster). “*Renewable Energy Training Unit – Mini Lab Implementation*”. Student and Faculty Research Posters. Centennial Celebration of Agricultural and Industrial Sciences Department. September 26, 2009, SHSU Gibbs Range, Huntsville, TX.

PROFESSIONAL/ACADEMIC PROJECTS – Undergraduate Students

- Sam Houston State University – Supervised undergraduate and graduate research projects
 - Jeremy Jackson (Fall 2014). Advance Automation and Control Project.
 - Leonard Trahan (Fall 2014). Advance Automation and Control Project.
 - Jonathan Nelson (Summer 2014). Equine Non-contact Thermography Device.
 - Christopher Redd (Summer 2014). Advance Programmable Logic Controllers.
 - Leonard Trahan (Summer 2014). Equine Non-contact Thermography Device.
 - Zachary Moorman (Spring 2014). Texas National Guard Energy Auditing Project.
 - Jonathan Nelson (Spring 2014). Texas National Guard Energy Auditing Project.
 - Joseph Zeigler (Spring 2014). Texas National Guard Energy Auditing Project.
 - Leonard Trahan (Spring 2014). Texas National Guard Energy Auditing Project.
 - Implementation of Circuit Solver Thermostatic Recirculation Valve Project. Therm-Omega-Tech, Inc. (Present)
 - Installation of Circuit Solver TRV valves with water meter in Bearkat Village Buildings at Sam Houston State University. Implementation of balancing recirculated domestic hot water systems in building apartments. Installation of transceivers for data acquisition.
 - High Schools United with NASA to Create Hardware (NASA- HUNCH) Project
 - Involve high school students to electronics, design, and video production projects.
 - ATMAE Student Chapter Robotics Team (Fall 2010 – Spring 2012)
 - James Myers (Fall 2013). Microcontroller Design Experiments.
 - Donald Mathis (Spring 2013). Advanced Microcontroller Studies.
 - Cogan Kelly (Spring 2013). Advanced Microcontroller Applications.
 - James Myers (Spring 2013). Experimental Microcontroller Projects.
 - Cogan Kelley (Fall 2012). National Instruments Lab View Project.
 - Donald Mathis (Fall 2012). Renewable Energy Experiments.
 - Ryan Brewer (Fall 2012). Implementation of an Electric Vehicle.
 - Trevarus Metcalf (Fall 2012). Alternative Energy Experiments.
 - Tony Van-Waes (Fall 2012). Advance Design Projects.
 - Zebulon Vance (Fall 2012). Development of an Electric Vehicle.
 - Jacqueline Morris (Fall 2012). Advanced PLC Applications.
 - Christopher Winiger (Fall 2012). Advanced Design Projects.
 - Steven Poe (Summer 2012). Renewable Energy Experiments.
 - Marc Chelf (Spring 2012). Building of Renewable Energy Equipment.
 - Colby Crumrine (Spring 2012). Electromechanical Design Applications.
 - Laxmi Kandel (Spring 2012). Microcontroller Applications – NASA HUNCH Project.

- Marc Chelf (Spring 2012). Microcontroller Projects – NASA HUNCH Project.
 - Ryan Waskoviak (Spring 2012). Design and Development of a RE Training Unit.
 - Malik Boudjellali (Spring 2012). Online Renewable Energy Course Development.
 - Edwin Villarreal (Spring 2012). Advanced 3D Simulation Designs.
 - Jason Myers (Fall 2011). Supervisory Training for the Electronics Workcenter.
 - Ruben Amador (Fall 2011). Hybrid Electric Boat Design and Development.
 - Chris Kurkjian (Fall 2011). Hybrid Electric Boat Design and Development.
 - Laxmi Kandel (Fall 2011). Electronics and Renewable Energy Workcenter.
 - Zebulon Vance (Fall 2011). Electronics and Renewable Energy Workcenter.
 - Chris Kurkjian (Fall 2011). Renewable Energy Experiments – Electric Boat Project.
 - Marc Chelf (Fall 2011). Alternative Energy Related Sustainable Projects.
 - Michaelle Pelzel (Fall 2011). Advanced Residential Design Projects Using AutoCAD.
 - Jason Myers (Fall 2011). Industrial Electronics Training Unit.
 - Daniel Hendren – Graduate (Summer 2011). Design & Development Experiment Using Autodesk Inventor.
 - Ronald Baird (Spring 2011). Renewable Energy Experiments.
 - Olamide Kolawole (Spring 2011). Programming for Robotics Applications.
 - Clint Wilkes – Graduate (Summer 2010). Hybrid Electric Boat Project.
 - Clint Wilkes – Graduate (Fall 2010). Design and Development of a Robot.
 - Colby Crumrine (Summer 2010 to Summer 2011). Design and Development of a Cost Efficient Hybrid Renewable Energy Training Equipment.
 - Jared Tipps (Summer 2010). Building a Hydrogen Fuel Cell, Solar, and Wind Powered Hybrid Electric Boat.
 - Broderick Sanford (Summer 2010). Circuit Analysis and Troubleshooting.
 - Loyd Callahan (Summer 2010). Design and Development of Hydrogen Fuel Cell, Solar, and Wind Powered Hybrid Electric Boat.
 - Christiaan Marius Meiring – Graduate (Fall 2010). Renewable Energy Experiments.
 - Ruben Amador (Fall 2010 to Fall 2011). The Design and Development of an Environment Friendly Hybrid Electric Boat.
 - Douglas Johnston (Spring 2010). Building an Alternative Energy Training Unit.
 - Charles Wagner (Spring 2010). Robotics Design and Manufacturing Process.
 - David Norwood (Spring 2010). Manufacturing Process on Robot Design.
 - Joseph Martinez (Spring 2010). Robot Design and Implementation.
 - Jay Nickerson (Spring 2010). Robot Design and Implementation.
 - Ross Teaff (Spring 2010). Building a Fully Functional Robot.
 - Joseph Martinez (Fall 2009). Data Acquisition with a Green Meter from RE Sources.
 - C.J. Wagner (Fall 2009). Building an Efficient Small Scale Wind Turbine.
 - Ronald Woychesin (Summer 2009). Research on Sustainable Energy Sources.
 - Michael Gauthier (Summer 2009). Advanced Troubleshooting of Lab Equipment and Electronics Circuits.
 - Mark Dearing (Summer and Fall 2009). Self-Powered Athletics Field Striping Machine.
 - Keith Robinson (Fall 2009). Industrial Motor Controllers.
 - Kenneth Parker (Fall 2009). Building a Complete Renewable Energy Training Unit.
 - James Copeland & Raymond Calvillo (Spring 2009). Self-Sufficient Energy Efficient House Design (Green Building) using Autodesk Inventor 2009.
 - Richard Henthorne (Fall 2008-Spring 2009). DC LED Lighting Analysis.
 - Richard Henthorne (Spring 2009). Piezoelectric Powered Flash Light.
 - Jaenetra Lewis (Summer 2009). Effective Industrial Mechanical Modeling.
- Product Engineering Center, John Deere (Waterloo, IA)

- Project, Wireless Sensor Networks Applications for Construction Equipment
 - Due to company confidentiality, project details are not open to public
- United Nations Headquarters (New York, NY)
 - Project, Database Design
 - Designed a new database linked to intranet of UN for Staff Counselor's Department
 - Designed a new web site connected to the new database for Staff Counselor Department.
- City College of New York, CUNY (New York, NY)
 - Graduate Work, Vehicle Classification
 - Designed three different classifiers to classify vehicles.
 - Implemented mean distance, KNN algorithms and designed neural network.
 - Made statistical analysis of classifiers based on confusion matrices and identified the best classifier for the vehicle classification problem. (Matlab)
- M.Kh. Dulati Taraz State University (Taraz, Kazakhstan)
 - Senior Design Project, Undergraduate Thesis
 - Internet and network security systems and related problems, May, 2000.

PROFESSIONAL DEVELOPMENT

Technical and Educational Trainings & Workshops

- *Advanced PV Systems Design & Install Training* (2 days – 20 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. May, 2014.
- *Advanced PV Code and General PV Training* (2 days – 16 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. October, 2014.
- *Solar PV Training* (2 days – 12 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. January, 2014.
- *Micro-Hydro Boot Camp* (3 days), Sustainable Energy Conference, Energy Path 2014 – Sustainable Energy Fund, Pre-Conference Energy Camp, June 2014, Albright College, PA..
- *Leadership Capacity Building for Manufacturing and Manufacturing Related Programs - Webinar II* (2 Hours). NSF-ATE Program Webinar. December 13, 2013.
- *Go Beyond Ladder Logic Programming and Prepare Your Graduates for Industrial HMI Monitoring and Control Solutions with Factorytalk View* (4 – Hours). Hands-on Workshop. Annual ATMAE Conference, New Orleans, LA. November 21, 2013.
- *Guitars in the Classroom? Absolutely! Building an Electric STEM Guitar* (4 Hours). Hands-on Workshop. Annual ATMAE Conference, New Orleans, LA. November 22, 2013.
- *Project Based Learning Splash by Jill Ackers* (3.5 Hours). Professional and Academic Center for Excellence (PACE), Sam Houston State University. October 4, 2013.
- *Leadership Capacity Building for Manufacturing and Manufacturing Related Programs- Webinar I* (1 Hour). NSF-ATE Program Webinar. September 27, 2013.
- *Introduction to Matlab Simulink* (1 Hour). MathWorks Webinar. September 20, 2013.

- *Electronics Technology* (1.5 Hours). NetWorks Webinar, Matecnetworks. NSF Funded Program. September 20, 2013.
- *Wind Energy Boot Camp* (3 days), Sustainable Energy Conference, Energy Path 2013 – Sustainable Energy Fund, Pre-Conference Energy Camp, Villanova University, PA. July 29-August 2, 2013.
- *Teaching and Learning Microcontrollers in Embedded System Designs* (3 days). NSF TUES DUE Type 2 Project. Wayne State University, Detroit, MI. July 10-12, 2013.
- *Solar Photovoltaic Energy Training* (2 days – 20 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. July 1-2, 2013.
- *VHDL and FPGA Design Workshop* (2 days). NSF-ATE Project. Electrical Engineering Technology Program, Michigan Technological University, Houghton, MI. May 10-11, 2013.
- *Advanced Solar Photovoltaic Energy Training* (2 days – 20 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. April 13-14, 2013.
- *Modeling and Simulation of Photovoltaic (PV) Solar Power Inverters* (1 hour). Recorded Webinar by MathWorks. March 13, 2013.
- *Advanced Solar Photovoltaic Energy Training* (2 days – 20 hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. January 24-25, 2013.
- *Implementation of the PIC Microcontroller Training System and Curriculum on Embedded System Designs in On-Campus and Distance Classes* (4 – Hours). Hands-on Workshop. Annual ATMAE Conference, Nashville, TN. November 15, 2012.
- *Photovoltaic Energy Training* (2 days – 20 Hours). Solar Instructor Training Network (SITN), sponsored by Houston Community College (HCC), South Central Region, Department of Energy. SHSU Campus, Huntsville, TX. November 17-18, 2012.
- *Geo Boot Camp*. (4 hours). New Waverly, TX. October 19, 2012.
- *National Instruments LabView Core 3 Certification Training* (16 Hours – 4 Days). Online Applied Training. November 5- 8, 2012.
- *National Instruments LabView Core 2 Certification Training* (3 Days –12 Hours). Online Applied Training. October 30 - November 1, 2012.
- *FPGA Design Advanced Workshop* (2 days). Configurable Space Microsystems Innovations and Applications Center (COSMIAC), Sponsored by National Science Foundation (NSF). University of Houston, TX. September 21 -22, 2012.
- *RE100: Introduction to Renewable Energy* (2 hours). Solar Energy International. Webinar.
- *Understanding Electrical Characterization of Solar Cells* (1 hour). Keithly Instrumentation Inc. Webinar. July 28, 2012.
- *Bridge to Technology* (1 and ½ Hours). NetWorks Webinar, Matecnetworks. May 11, 2012.
- *Introduction to OSHA and OSHA Inspections* (3 - Hours). Occupational Safety and Health Administration (OSHA), The United States Department of Labor. SHSU, Huntsville, TX. April 23, 2012.
- *Introduction to Safety and Health Management Systems* (4 Hours). Occupational Safety and Health Administration (OSHA), The United States Department of Labor. SHSU, Huntsville, TX. April 18, 2012.
- *Managing Safety and Security Compliance in Energy and Utilities Industry* (1 Hour). IEEE Spectrum Webinar Series. March 27, 2013.
- *Piezoelectric Device Simulations* (1 Hour). IEEE Spectrum Webinar Series. March 15, 2013.

- *Entrepreneurial Development* (1.5 Hours). NetWorks Webinar, Matecnetworks. February 10, 2012.
- *National Instruments LabView Core 1 Certification Training* (4 Days - 20 Hours). February 6-9, 2012.
- *Solar Thermal and Solar Photovoltaic Workshop* (3.5 Hours). ATMAE Annual Conference, Cleveland, OH. November 10, 2011.
- *Collaboration with Public Schools for Grants and Research by Kenneth T. Henson* (3.5 Hours). The Office of Research and Special Programs, The College of Education and the Professional and Academic Center for Excellence. September 30, 2011.
- High Impact Technology Exchange Conference (HI-TECH 2011) - Educating America's Technical Workforce, Hyatt Regency San Francisco, CA. July 25-28, 2011.
 - *SCME: From Making to Testing Micro Transducers in the Classroom-Hands-on Kits for STEM Education* (4 hours).
 - *Teaching Basic Digital Logic with FPGAs* (4 hours).
 - *Teaching Green Engineering, Biomedical Engineering, and Circuits* (4 hours).
 - *Alternative Energy and Electricity: Using Wind and Solar Technology in the Classroom* (4 hours).
- *Solar Thermal Boot Camp* (3 days), Sustainable Energy Conference, Energy Path 2011 – Sustainable Energy Fund, Pre-Conference Energy Camp, DeSales University, PA. June 27-30 2011.
- *IEEE Real World Engineering Projects: Discovery-Based Curriculum Modules for First-Year Students* (3 Hours). 2011 Annual ASEE conference, Vancouver, B.C., CA. June 26, 2012.
- *Advanced Physical Modeling Tackles the Complexity of Modern Engineering* (1 Hour). Maplesoft Webinar. December 7, 2011.
- *Adding Sustainability to Engineering Education* (2 days). Center for Sustainable Engineering (CSE) Educational Modules Workshop, Syracuse Center of Excellence in Environmental and Energy Systems and Syracuse University, May 25-27 2011.
- *National Science Foundation (NSF) Day Workshops at Texas State University* (8 Hours). San Marcos, TX. February 18, 2011.
- *Solar Path Finder* (1 and ½ Hours). Mr. Dave Kostick – IMT Solar. Webinar. February 19, 2011.
- *Electronics Education Today* (1.5 Hours). NetWorks Webinar, Matecnetworks. NSF Funded Program. November, 12, 2010.
- *SHSU Developing NSF Grants Training* (2 Hours). Office of Research and Sponsored Programs. October 14, 2010.
- *SHSU COS Funding Opportunities Training* (2 Hours). Office of Research and Sponsored Programs. September 27, 2010.
- *Revitalizing Electronics Programs* (1.5 Hours). NetWorks Webinar, Matecnetworks. NSF Funded Program. May 14, 2010.
- *SHSU Foundation Funding Training*, Office of Research and Sponsored Programs at SHSU (February 11, 2010)
- *ATMAE Accreditation Team Member Training*. ATMAE 2008 Annual Conference, TN, 2008.
- *ATMAE Accreditation Self-Study Development*. ATMAE 2008 Annual Conference, TN, 2008.
- *ATMAE Accreditation Team Chair Training*. ATMAE 2008 Annual Conference, TN, 2008.
- *Patent Training*. John Deere Waterloo Works, IA, 2007.
- *UNIX Operating System*. John Deere Waterloo Works, IA, 2007.
- *SAP Training For Cost, Master Data, And Product Structure Modules*. John Deere Waterloo Works, IA, 2007.

- *Advanced Geometric Dimensioning & Tolerancing Training (5 Days)*. John Deere Waterloo Works, IA, 2006.
- *Pro/Engineer WildFire Training*. John Deere Waterloo Works, IA, 2006.
- *ANSYS Design Modeler Training*. John Deere Waterloo Works, IA, 2006.
- *M.S. Excel Macro Programming*. John Deere Waterloo Works, IA, 2006.
- *Occupational Safety Trainings*. John Deere Waterloo Works, IA, 2005.
- *Information and Communication Technology High Level Business Case Training*. United Nations Headquarters, NY, 2004.
- *iSeek*, The United Nations Intranet System Training. United Nations Headquarters, NY, 2004.

PROFESSIONAL SERVICE

Manuscript Editor

- The Technology Interface International Journal (TIIJ), 2011 – 2013

Center Fellow

- Center for Rural Studies at Sam Houston State University

Executive Board and Committees

- Executive Board – Co-Chair - 4th International Association of Journals and Conferences. (IAJC/ISAM 2014), Orlando, FL.
- Proceeding Committee - 4th International Association of Journals and Conferences. (IAJC/ISAM 2014), Orlando, FL.

Peer Panelist and Evaluator

- Community and Education Division of the National Institute of Food and Agriculture (NIFA-USDA), 2014.
- Agriculture Small Business Innovation Research (SBIR), USDA – National Institute of Food and Agriculture (NIFA)
- Higher Education Challenge Program (HEC), USDA – National Institute of Food and Agriculture (NIFA)

Reviewer – Journal and Conference Publications and 3 Books

- 4th International Association of Journals and Conferences. (IAJC/ISAM 2014), Orlando, FL.
- American Society for Engineering Education Annual Conference (ASEE 2014). Indianapolis, IN.
- Association of Technology, Management, and Applied Engineering Annual Conference (ATMAE 2014). St. Louis, MO.
- Smart Materials and Structures Journal, 2014.
- Journal of Energy Research & Social Science, 2014.
- Journal of Energy Science and Engineering, 2014.
- Encyclopedia of Energy Engineering and Technology. Publication of Taylor & Francis Group
- Elliot Gindis, “Up and Running with AutoCAD 2010”, Book Review, Elsevier, Academic Press (AP) Publications
- American Society for Engineering Education (ASEE) Conference Papers
- ASEE-GSW (American Society for Engineering Education – Gulf-Southwest Section) Conference Papers
- The Technology Interface International Journal (TIIJ)

- Association of Technology, Management, and Applied Engineering (ATMAE) Conference Papers
- Smart Materials and Structures Journal (IOP)
- International Journal of Energy for a Clean Environment.
- IEEE Education Engineering (EDUCON) Conference Papers
- Institute of Electrical and Electronics Engineers (IEEE)
- The International Journal of Engineering Research & Innovation (IJERI)
- The International Journal of Modern Engineering (IJME)
- Journal of Applied Science & Engineering Technology (JASET)
- Agriculture, Environment and Energy related Library Resources Review, Advanced Technology Environmental and Energy Center (ATEEC), approximately ten resources reviewed each week and a report generated.

Judge

- 2014 SET BEST Robotics Competition, Bernard G. Johnson Coliseum, Sam Houston State University.
- 2013 SET BEST Robotics Competition, Bernard G. Johnson Coliseum, Sam Houston State University.
- 2012 SET BEST Robotics Competition, Bernard G. Johnson Coliseum, Sam Houston State University.
- TX Technology Student Association (TX TSA) Annual State Contest, Waco, TX.
- Brazos Valley Technology Education Association (BVTEA) Regional Annual Contest.
- Energy & Environmental related projects, International Sustainable World Energy, Engineering, and Environment (I-SWEEEP) Project Olympiad, Houston, TX.
- Engineering Notebook Judging, BEST Robotics Competition, Sam Houston State University.
- Robotics Competitions, Association of Technology, Management, and Applied Engineering (ATMAE).
- Graduate Research and Related Poster Presentations, Association of Technology, Management, and Applied Engineering (ATMAE).
- Brazos Valley Technology Science Association Regional Contest.

Program Chair and Moderator

- Moderator - 4th International Association of Journals and Conferences. (IAJC/ISAM 2014), Orlando, FL.
- Moderator – Energy Conversion and Conservation Division, American Society for Engineering Education Annual Conference, June 2014, Indianapolis, IN.
- Moderator – Electrical and Computer Engineering Division, American Society for Engineering Education Annual Conference, June 2013, Atlanta, GA.
- Moderator – The Fifth Annual SHSU Undergraduate Research Symposium, April 21, 2012.
- Moderator – The Fourth Annual SHSU Undergraduate Research Symposium, April 16, 2011.
- Moderator – Engineering Technology Division, American Society for Engineering Education Annual Conference, June 2012, San Antonio, TX.
- Moderator – Computing & Information Technology, American Society for Engineering Education Annual Conference, June 2012 San Antonio, TX.
- Moderator – Energy Conversion Conservation Division, American Society for Engineering Education Annual Conference, June 2012, San Antonio, TX.
- Moderator – Engineering Technology Division, American Society for Engineering Education Annual Conference, June 2011, Vancouver, Canada.

- Moderator – Energy Conversion Conservation Division, American Society for Engineering Education Annual Conference, 2011 Vancouver, Canada.
- Program Chair – Engineering Technology Division, 2011 IAJC-ASEE International Joint Annual Conference on Engineering and Related Technology, April 2011, Hartford, CT.
- Session Chair – Topics in Green & Alternative Technologies (ENT 202), 2011 IAJC-ASEE International Joint Annual Conference on Engineering and Related Technology, April 2011, Hartford, CT.
- Session Chair – Topics in Electrical & Power Systems (ENG 105), 2011 IAJC-ASEE International Joint Annual Conference on Engineering and Related Technology, April 2011, Hartford, CT.
- Moderator – Manufacturing Division, American Society for Engineering Education Annual Conference, 2010 Louisville, KY.
- Moderator – Engineering Technology Division, American Society for Engineering Education Annual Conference, 2010 Louisville, KY.
- Moderator – New Engineering Education Division, American Society for Engineering Education Annual Conference, June 2010, Louisville, KY.
- Moderator – The Third Annual SHSU Undergraduate Research Symposium, Agriculture and Environment Session, April 24, 2010.
- Moderator – Technology Session III, American Society for Engineering Education, Gulf Southwest Annual Conference, March 2010, McNeese State University, LA.
- Co-Chair – The International Conference on Information Technology - New Generations (ITNG). Circuit and System Design Track. April 2009.

AWARDS & SCHOLARSHIPS/FELLOWSHIPS

- Scholarship to attend the Energypath 2014 – Sustainable Energy Fund Conference and Pre Conference Energy Boot Camps. ~\$2500 from Sustainable Energy Fund of PA (June, 2014).
- Nominated for 2014 SHSU College of Sciences Faculty Excellence in Research Award.
- Nominated for 2014 SHSU Scholarly and Creative Accomplishments Award.
- Nominated for 2013 SHSU College of Sciences Faculty Excellence in Research Award.
- 2013 ATMAE Faculty Excellence Award. University Award for Academic Excellence.
- Scholarship to attend the NSF-ATE VHDL and FPGA Design Workshop, Electrical Engineering Technology Program, Michigan Technological University, May 10-11 2013.
- Scholarship to attend the Energypath 2013 – Sustainable Energy Fund Conference and Pre Conference Energy Boot Camps. Sustainable Energy Fund of PA, June 29-August 2, 2013.
- Scholarship to attend Teaching and Learning Microcontrollers in Embedded System Designs Workshop. NSF TUES DUE Type 2 Project. Wayne State University, Detroit, MI. July 10-12, 2013.
- Scholarship to attend the Energypath 2012 – Sustainable Energy Fund Conference and Pre Conference Energy Boot Camps. Sustainable Energy Fund of PA, June 2012.
- Fellowship to attend the High Impact Technology Exchange Conference (HI-TEC). NSF funded GeoTech Center at Delmar College July 2011.
- Scholarship to attend the Energypath 2011 – Sustainable Energy Fund Conference and Pre Conference Energy Boot Camps. Sustainable Energy Fund of PA, June 2011.
- Scholarship to attend the Center for Sustainable Engineering (CSE) Workshop. Syracuse Center of Excellence in Environmental and Energy Systems and Syracuse University, May 2011.

- Outstanding Doctoral Dissertation Award, (Doctoral Dissertation: “Low Power Energy Harvesting and Storage Techniques from Ambient Human Powered Energy Sources”) from University of Northern Iowa Graduate College, December 2008.

PROFESSIONAL MEMBERSHIPS

- American Society of Engineering Education (ASEE) 2006-Present
 - Design in Engineering Education Division
 - Energy Conversion and Conservation Division
 - Engineering Technology Division
 - Electrical and Computer Engineering Division
 - Computing & Information Technology Division
 - Instrumentation Division
 - Information Systems Division
 - Multidisciplinary Engineering Division
- Epsilon Pi Tau Honor Society (EPT) 2009-Present
- Institute of Electrical and Electronics Engineers (IEEE) 2007-Present
 - Institute of Electrical and Electronics Engineers (IEEE) - Southern Section
- The Association of Technology, Management, and Applied Engineering (ATMAE) 2006-Present