TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Semih Aslan Title: Associate Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PhD	2010	Illinois Institute of Technology	Computer Engineering	Reconfigurable Processing Engines for Area and Power Efficient Arithmetic and Matrix Operations
M.S.	2003	Illinois Institute of Technology	Electrical Engineering	
B.S.	1994	Istanbul Technical University	Electrical Engineering	Electrostatic Field Analysis of High Voltage Cables

C. University Experience

Position	*University*	*Dates*
Associate Professor	Texas State University	2017 - Present
Assistant Professor	Texas State University	2011 - 2017
Post-Doctoral Research Associate	Illinois Institute of Technology	2011 - 2011
Research Assistant	Illinois Institute of Technology	2009 - 2010
Teaching Assistant	Illinois Institute of Technology	2008 - 2009
Instructor	American Academy of Art	2008 - 2009
Associate Dean	ITT Technical Institute	2004 - 2006
Instructor	ITT Technical Institute	2000 - 2010

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Sr. FPGA Design Engineer	Motorola	2010 - 2011
Electrical Engineer	SA-RA	1994 - 1994

E. Other Professional Credentials (licensure, certification, etc.)

[1] Master Tutor Certification – Lansing Community Collage 1999

[2] Xilinx Workshop Certification, FMAC, New Mexico State University, 2008
- FPGA
- Embedded System Design
- DSP

[3] Xilinx Workshop Certification, EUROPRACTICE, Oxford, England, 2012
- Advanced DSP
- AutoESL High-Level Synthesis Hardware Design
- FPGA Linux Development

[4] The Program for Excellence in Teaching and Learning, Texas State University, 2012

[5] Pacific Crest, Teaching Institute, 2012

II. TEACHING

A. Teaching Honors and Awards:

Employee of the Year – ITT Technical Institute 2001, 2004
District Instructor of the Year – ITT Technical Institute 2004

B. Courses Taught:

Texas State University
EE 3350: Electronics I (Fall 2011, Fall 2012, Fall 2013, Fall 2014, Summer 2015, Summer 2017, Spring 2018)
EE 3370: Signals and Systems (Fall 2012, Spring 2013, Spring 2014, Spring 2015)
EE 4377: Introduction to Digital Signal Processing (Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Fall 2017)
EE 4350: Electronics II (Fall 2016)
EE 4352: Introduction to VLSI Design (Fall 2013, Fall 2014, Fall 2015)
ENGR 5310: Probability, Random Variables, & Stochastic Processes for Engineers (Fall 2015)
EE 5320: Advanced Computer Architecture and Arithmetic (Spring 2016, Spring 2018)
EE 5330: Embedded and Real-Time Computing (Spring 2017, Fall 2017)
EE 5377: Statistical Signal Processing (Fall 2016)

Illinois Institute of Technology
Teaching Assistant and Lab Instructor
ECE 446: Advanced Logic Design
ECE 441: Microcomputers
ECE 437: Digital Signal Processing I
ECE 742: Digital System-on-Chip
ECE 743: Signal and Data Compression with Embedded Systems

ECE 744: Embedded Digital Systems for Time-Frequency Distribution, Signal Modeling and Estimation

American Academy of Art
MTH 101: Mathematics

ITT Technical Institute

ET 115: DC Electronics
ET 145: AC Electronics
ET 215: Electronic Devices I
ET 245: Electronic Devices II
ET 255: Digital Electronics I
ET 275: Electronic Communication Systems I
ET 285: Digital Electronics II
ET 315: Electronic Communication Systems II
ET 345: Control Systems
ET 355: Microprocessors
ET 445: Advanced Circuit Analysis I
ET 446: Advanced Circuit Analysis II
ET 455: Digital Communication Systems I
ET 456: Digital Communication Systems II
IT 104: Introduction to Computer Programming
TB 133: Strategies for the Technical Professional
TB 143: Introduction to Personal Computers
TB 145: Introduction to Computing
GE 127: Collage Mathematics I
GE 184: Problem Solving
GE 192: Collage Mathematics II
GE 253: Physics

C. Graduate Theses/Dissertations, Honors Theses, or Exit Committees (if supervisor, please indicate):

D. Courses Prepared and Curriculum Development:

Be part of preparation of the following short courses to be taught at Illinois Institute of Technology

Digital Circuit Design and Applications
- Part I – Digital Circuit Design Fundamentals
- Part II – Digital Systems and Applications using VHDL

Microprocessor Fundamentals and Embedded System Design
- Part I – Microprocessor Fundamentals
- Part II – Embedded System Design

Sensor Fundamentals, Systems and Applications

Part I – Sensor Fundamentals
Part II – Sensor Systems and Applications

E. Funded External Teaching Grants and Contracts:

F. Submitted, but not Funded, External Teaching Grants and Contracts:

G. Funded Internal Teaching Grants and Contracts:

H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

I. Other:

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press)

1. Books (if not refereed, please indicate)

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

d. Chapters in Books:

[1] J. Saniie, E. Oruklu, Spenser Gilliland, and S. Aslan, "*Smart Sensors with System-on-Chip Processing Engines for Ultrasonic Imaging and Nondestructive Testing Applications*", Chapter in: "*Smart Sensors and MEMS, Intelligent Devices and Microsystems for Industrial Applications*", Stoyan Nihtianov and Antonio Luque Estepa (Editors), Woodhead Publishing, 1st Ed., 2013. ISBN: 9780857095022, 2nd Ed., 2017. ISBN: 9780081013960

e. Creative Books:

2. Articles (Student authors are underlined)

a. Refereed Journal Articles:

[1] P. Dehghanian, S. Aslan and P. Dehghanian, "Maintaining Electric System Safety through An Enhanced Network Resilience," in IEEE Transactions on Industry Applications, 2018.

[2] Zaid Almusaied, Bahram Asiabanpour, and Semih Aslan, "Optimization of Solar Energy Harvesting: An Empirical Approach," Journal of Solar Energy, vol. 2018, Article ID 9609735, 8 pages, 2018.

[3] S. Aslan, S. Niu, J. Saniie, "*Hardware and Software Architectures for QR Decomposition using Recursive Least Square Algorithm*", Journal of Circuits, Systems and Signal Processing, Springer Publishing, accepted with minor revision.

[4] S. Aslan, K. R. Chandrai, V. Siddaiah, "*Unified Coverage Methodology for SoC Post-Silicon Validation"*. Optics and Photonics, Scientific Research Publishing, vol. 6, no. 10, October 2016.

[5] B. Asiabanpour, Z. Almusaied, S. Aslan, M. Mitchell, E. Leake, H. Lee, J. Fuentes, K. Rainosek, N. Hawkes, A. Bland, "*Fixed versus Sun Tracking Solar Panels: An Economic Analysis*", Springer Journal of Clean Technologies and Environmental Policy, Springer Publishing, pp. 1-9, October, 2016, http://dx.doi.org/10.1007/s10098-016-1292-y

[6] H. Salamy, and S. Aslan, "*Pipelined-Scheduling of Multiple Embedded Applications on a Multi-processor-SoC*", Journal of Circuits, Systems, and Computers, World Scientific Publishing Company, pp. 1-9, September, 2016, http://dx.doi.org/10.1142/S0218126617500426.

[7] S. Aslan, E. Mohammad, and H. Salamy, "*Open Source Synthesis and Verification Tool for Fixed-to-Floating and Floating-to-Fixed Points Conversions*". Circuits and Systems, Scientific Research Publishing, vol. 7, no. 11, pp. 3874-3885, September, 2016, http://dx.doi.org/10.4236/cs.2016.711323.

[8] S. Aslan, "*Reconfigurable HDL Library Development Platform for Arithmetic and Matrix Operations*", International Journal of Computer Applications, vol. 141, no. 4, pp. 40-50, May, 2016., http://dx.doi.org/10.5120/ijca2016909618.

[9] S. Aslan, "*MATLAB Based High Level Synthesis Engine for Area and Power Efficient Arithmetic Operations*", International Journal of Computational Engineering Research, vol. 6, no. 4, pp. 1-8, April, 2016

[10] S. Aslan, and J. Saniie, "*Matrix Operations Design Tool for FPGA and VLSI Systems*". Circuits and Systems, Scientific Research Publishing, vol. 7, no. 2, pp. 43-50, February, 2016, http://dx.doi.org/10.4236/cs.2016.72005

[11] C. Desmouliers, E. Oruklu, S. Aslan, F. M. Vallina, J. Saniie, "'*Image and Video Processing Platform for FPGAs Using High-Level Synthesis*", IET Computers Digital Techniques, vol. 6, no. 6, pp. 414– 425, November 2012, http://dx.doi.org/10.1049/iet-cdt.2011.0156

[12] E. Oruklu, R. Hanley, S. Aslan, C. Desmouliers, F. M. Vallina, J. Saniie, "*System-on-Chip Design Using High-Level Synthesis Tools*", Circuits and Systems, Scientific Research Publishing, vol. 3, no. 1, pp. 1-9, January 2012, http://dx.doi.org/10.4236/cs.2012.31001.

b. Non-refereed Articles:

3. Conference Proceedings (Student authors are underlined)

a. Refereed Conference Proceedings:

[1] P. Dehghanian, S. Aslan, P. Dehghanian, "*Quantifying Power System Resiliency Improvement Using Network Reconfiguration*", Circuits and Systems (MWSCAS) 2017 IEEE 60th International Midwest Symposium on, pp. 1364-1367, Boston, MA 2017.

[2] M. A. U. Ekram, A. Chaudhary, A. Yadav, J. Khanal and S. Aslan, "*Book organization checking algorithm using image segmentation and OCR*," 2017 IEEE 60th International Midwest Symposium on Circuits and Systems (MWSCAS), Boston, MA, 2017, pp. 196-199.

[3] P. Desai, S. Aslan and J. Saniie, "*FPGA implementation of Gram-Schmidt QR decomposition using high level synthesis*," 2017 IEEE International Conference on Electro Information Technology (EIT), Lincoln, NE, 2017, pp. 482-487.

[4] P. Dehghanian, S. Aslan, "*Enhancing Electric Safety by Improving System Resiliency in Face of Extreme Emergencies*", IEEE IAS Electrical Safety Workshop (ESW), 2017.

[5] Z. Almusaied, B. Asiabanpour, N. Hawkes, K. Rainosek, S. Aslan, "*Optimization of the Solar Energy Harvesting Using Statistical Optimization*", Proceedings of the International Conference on Scientific Computing CSC-16, pp. 30-33, Las Vegas, Nevada, 2016.

[6] Z. Almusaied, B. Asiabanpour, S. Aslan, "*An experimental investigation of the environmental and system setting factors affecting the photovoltaic panel energy output efficiency*", 7th International Research Conference for Graduate Students, TX, 2015.

[7] H. Salamy, S. Aslan, "*A genetic algorithm based approach to pipelined memory-aware scheduling on an MPSo*C", IEEE Circuits and Systems Conference (DCAS), pp. 1-4, Dallas, TX, 2015.

[8] B. Asiabanpour, S. Aslan, H. Salamy, Z. Almusaied, J. Warren, "*Web-based Data Management System Design and Development for the Multisite Renewable Energy Research and Education Partnership*", Worldcomp 2015: The 11th International Conference on Grid & Cloud Computing and Applications, pp. 77-81, Las Vegas, NV, 2015.

[9] Z. Almusaid, B. Asiabanpour, H. Salamy, J. Jimenez, S. Aslan, "*Solar Energy Generation: Roadblocks and Their Economically Viable Remedies*", Proceedings of the Industrial and Systems Engineering Research Conference, IERC2015, pp. 1114-1121, TN, 2015.

[10] A. Ortiz, B. Asiabanpour, S. Aslan, J. Jimenez, H. Salamy, Y. Kim, "*Engaging Students in Environmental Learning and Awareness of Green Design Technologies and Careers through a Pre-Engineering Program*", ASEE, WA, 2015.

[11] S. Aslan, B. Asiabanpour, H. Salamy, J. Jimenez, R. Cook, "*Constant Power Production and Harvesting Using Roof Ventilation Systems*", International Conference on Flexible Automation and Intelligent Manufacturing, pp. 291-297, FAIM24, San Antonio, TX, 2014.

[12] S. Aslan, H. Salamy, J. Saniie "*A High-Level Synthesis and Verification Tool for Application Specific Division and kth-Root Processing Engines*", IEEE International Midwest Symposium on Circuits and Systems, pp. 1051-1054, MWSCAS, 2013.

[13] S. Niu, S. Wang, S. Aslan, J. Saniie, "*Hardware and software design for QR Decomposition Recursive Least Square algorithm*", IEEE International Midwest Symposium on Circuits and Systems, pp. 117-120, MWSCAS, 2013.

[14] H. Salamy, S. Aslan, "*Energy-Aware Schedule Optimization on Multicore Systems*", IEEE International Midwest Symposium on Circuits and Systems, pp. 109-112, MWSCAS, 2013

[15] H. Salamy, S. Aslan, D. Methukumalli," *Task Scheduling on Multicores under Energy and Power Constraints*", IEEE Canadian Conference on Electrical and Computer Engineering, pp. 1-4, CCECE, 2013.

[16] S. Niu, S. Aslan, J. Saniie "*FPGA based Architectures for High Performance Adaptive FIR Filter Systems*", 2013 IEEE International Instrumentation and Measurement Technology Conference, pp. 1662 – 1665, I2MTC, 2013.

[17] S. Gilliland, J. Saniie, S. Aslan "Linux Based Reconfigurable Platform for High Speed Ultrasonic Imaging", IEEE International Midwest Symposium on Circuits and Systems, pp. 486-489, MWSCAS, 2012.

[18] S. Aslan, S. Niu, J. Saniie, "*FPGA Implementation of Fast QR Decomposition Based on Givens Rotation*", IEEE International Midwest Symposium on Circuits and Systems, pp. 470-473, MWSCAS, 2012.

[19] S. Aslan, E. Oruklu, J. Saniie, "*A High-Level Synthesis and Verification Tool for Fixed to Floating Point Conversion*", IEEE International Midwest Symposium on Circuits and Systems, pp. 908-911, MWSCAS, 2012.

[20] S. Aslan, E. Oruklu, J. Saniie, "*Architectural Design Tool for Low Area Band Matrix LU Factorization*", IEEE Electro/Information Technology Conference, pp. 1-6, EIT, 2011.

[21] S. Aslan, C. Desmouliers, E. Oruklu, J. Saniie, "*An Efficient Hardware Design Tool for Scalable Matrix Multiplication*", IEEE International Midwest Symposium on Circuits and Systems, pp. 1262-1265, MWSCAS, 2010.

[22] S. Aslan, C. Desmouliers, E. Oruklu, J. Saniie, "*High Performance Reconfigurable Pipelined Matrix Multiplication Module Designer*". IEEE Electro/Information Technology Conference, pp. 1-6, EIT, 2010.

[23] C. Desmouliers, S. Aslan, E. Oruklu, J. Saniie, F. Martinez, "*HW/SW Co-design Platform for Image and Video Processing Applications on Virtex-5 FPGA using PICO*", IEEE Electro/Information Technology Conference, pp. 1-6, EIT, 2010.

[24] E. Oruklu, S. Aslan, J. Saniie, "*Applications of time-frequency distributions for ultrasonic flaw detection*", IEEE International Ultrasonic Symposium, pp. 2000-2003, IUS, 2009.

[25] S. Aslan, E. Oruklu, J. Saniie, "*Realization of area efficient QR factorization using unified division, square root, and inverse square root hardware*", IEEE Electro/Information Technology Conference, pp. 245-250, EIT, 2009.

b. Non-refereed:

4. Abstracts:

5. Reports:

6. Book Reviews:
[1] A. Malvino, D. Bates, "*Electronic Principles*", 7th Ed, McGraw-Hill Publisher, November 2012

7. Other Works in Print:

B. Works not in Print

1. Papers Presented at Professional Meetings:

2. Invited Talks, Lectures, and Presentations:

[1] Green Energy Workshop – Texas State University, 2/20/2013

[2] Texas State University Guest Lecturer (Fall 2012, Spring 2013, Fall 2014, Spring 2014, Spring 2016, Fall 2016) - EE 2420: Digital Logic

[3] Illinois Institute of Technology Guest Lecturer

ECE 446: Advanced Logic Design
ECE 742: Digital System-on-Chip
ECE 743: Signal and Data Compression with Embedded Systems
ECE 744: Embedded Digital Systems for Time-Frequency Distribution, Signal Modeling and Estimation

3. Consultancies:

4. Workshops:

[1] Asiabanpour, B., Aslan, S., Jimenez, J., Salamy, H., Kim, Y., Ortiz, A., and Viswanatan, V., Weeklong: "*Renewable energy research and education partnership*" for the faculty from the partner community colleges, 2015.

[2] Asiabanpour, B., Aslan, S., Ortiz, A., Jimenez, J., Kim, Y., Salamy, H., Weeklong: "*Designing Green-Engineering Summer Camp*", 2014.

[3] Asiabanpour, B., Jin, T., Chen, H., Jimenez, J., Aslan, S., "*Green Engineering I and II*", 2+2 hours session, High Tech U, San Marcos, TX, February 2013.

[4] S. Aslan, C. Desmouliers; "*Adding a Custom Hardware IP, and Interfacing it with Software using EDK*." IIT Technical Report, 2009.

[5] S. Aslan, C. Desmouliers; "*Adding a Custom Hardware IP, and Interfacing it with Software using System Generator and EDK*." IIT Technical Report, 2009.

[6] S. Aslan, C. Desmouliers; "*Adding a Synfora Generated Hardware IP, and Interfacing it with Software using System Generator and EDK*." IIT Technical Report, 2009.

[7] S. Aslan, C. Desmouliers; "*Synfora and Xilinx System Generator, Hardware in Loop Verification.*" IIT Technical Report, 2009.

5. Other Works not in Print:

a. Works "submitted" or "under review"

[1] S. Aslan, B. Asiabanpour, M. Londa, H. Salamy, J. Jimenez, "*A BRIDGE Program to Engage, Sustain and Empower Women and Minorities in STEM*", NACTA Journal Vol. 60, accepted.

[2] Z. Almusaied, B. Asiabanpour, S. Aslan, N. Hawkes, K. Rainosek, "*Optimization of Solar Energy Harvesting: An Empirical Approach*", Journal of Green Energy, Taylor and Francis, submitted.

[3] S. Aslan, E. Mohammad, D. K. Murthy, R. Krishnappa, M. Rodriguez, "*MATLAB Based Multiplier Free FIR Filter Design System*", Journal of Circuits, Systems, and Computers, World Scientific Publishing Company, submitted.

[4] S. Aslan, E. Mohammad, "*Size Independent Band Matrix Packing/Unpacking Design System*", Journal of Circuits, Systems, and Computers, World Scientific Publishing Company, submitted.

[5] S. Aslan, E. Mohammad, M. S. Sefat, "*MATLAB Based Size Efficient Packed Matrix Operations System*", Journal of Circuits, Systems, Springer Publishing, submitted.

[6] S. Aslan, D. K. Murthy, R. Krishnappa, "*Shiny Based Dynamic Learning Environment for Signal and Systems*", R Journal, submitted.

b. Works "in progress"

[1] S. Aslan, J. Saniie, "*Architectural Design Tools for Low Power, High Speed Band Matrix Operations*", in progress.

[2] S. Aslan, B. Asiabanpour, M. Londa, "*Increase Industry Involvement in Dynamic Engineering Education*", in progress.

[3] S. Aslan, E. Mohammad, "*High Level Synthesis Fixed-Float Conversion Block for Dynamic Systems*", in progress.

[4] S. Aslan, E. Mohammad, "*OpenCV Based Real Time Face Recognition System*", in progress.

[5] S. Aslan, K. R. Chandrai, V. Siddaiah, Jafar Saniie, "*Fast Strassen Matrix Multiplication using Multi Core Processing*", in progress.

[6] S. Aslan, Hassan Salamy, Jafar Saniie, "*Dynamic Teaching for Digital Signal Processing*", in progress.

[7] S. Aslan, K. R. Chandrai, V. Siddaiah, "*Large Matrix QR Factorization for MIMO Systems*", in progress.

[8] S. Aslan, "*Dynamic and Reproducible research with R Markdown, LaTeX and TikZ*", in progress.

c. Other works not in print

[1] S. Aslan, "*Using Multisim Video Tutorial Series*." Texas State University, 2011
[2] S. Aslan, "*Using MATLAB Video Tutorial Series.*" Texas State University, 2011
[3] S. Aslan, "*Using Modelsim Video Tutorial Series.*" Texas State University, 2011

C. Grants and Contracts

1. Funded External Grants and Contracts:

[1] NEC Corporation of America, "Through-The-Earth Data Transmission Systems to Enable Buried Environmental Sensors", Budget: $69,000, PI (Aslan, S.), CoPI (Stern, H). Year: 2016-2017.

[2] National Institute of Food and Agriculture/USDA, "EverGreen: A Cross-Disciplinary Research-Based Education Program for Hispanic Students at the Food-Water-Energy Intersection", Budget: $1,000,000, Project Director: B. Asiabanpour, Other Personal: K. Mix, N. Wagner, S. Aslan. Year: 2016-2020.

[3] NEC Corporation of America, "Joint Study for a Data-Intensive Analysis of the NEC In-Vehicle Passenger Detection System – Phase III", Budget: $54,900, PI (Jimenez, J.), CoPIs (Aslan, S). Year: 2016.

[4] NEC Corporation of America, "Joint Study for a Data-Intensive Analysis of the NEC In-Vehicle Passenger Detection System – Phase II", Budget: $44,600, PI (Jimenez, J.), CoPIs (Aslan, S, Perez, E.). Year: 2016.

[5] NEC Corporation of America, "Joint Study for a Data-Intensive Analysis of the NEC In-Vehicle Passenger Detection System – Phase I", Budget: $43,008, PI (Jimenez, J.), CoPIs (Aslan, S, Viswanathan, V, Stapleton, S, McClellan, S). Year: 2015.

[6] Freescale, "Bringing the Internet of Things to Texas State University", Budget: $350,000. ($100k equipment and $250k students and faculty support), Type: Donation, Role: One of leading members. Other Personnel: William Stapleton, Hassan Salamy, and Vishu Viswanathan, Year: 2014.

[7] Department of Education-MSEIP, 2014-17, "REENERGIZE: Recruitment and Retention of Students in STEM Programs through a Renewable Energy Research and Education Partnership with Five Minority Institutions" PI (Asiabanpour, B.) and CoPI (Aslan, S., Jimenez, J., Salamy, H., Kim, Y., Ortiz, A., and Viswanatan, V.), Amount: $613,822.

[8] USDA- WAMS, 2014-17, Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program, "A BRIDGE Program to Engage, Sustain and Empower Women and Minorities in STEM (ESE WAMS)", PI(Aslan, S.), CoPIs (Asiabanpour, B., Salamy, H., Jimenez, J., Londa, M.). Amount: $417,017 ($106,505 USDA + $310,512 Matching from Intel)

[9] Halliburton, 2014, "Developing High School Students Curiosity in Science and technology in Capstone Design Days" PI (Jin, T.) and CoPI (Apan, Q., Asiabanpour, B., Aslan, S., Jimenez, J., Francis, M., Romanella, S., Stern, H., Tate, J.,), Amount: $8,600.

[10] Texas Higher Education Coordinating Board (THECB) ESP- Engineering Summer Program, 2014, "Designing Green-Engineering Summer Camp" PI. (Asiabanpour, B.), CoPIs (Aslan, S., Ortiz, A., Jimenez, J., Kim, Y., Salamy, H.), Amount: $12,500.

[11] "Renewable Energy Teaching and Research in the SMART Lab (System Modeling and Renewable Technology", Innovation Energy Demonstration Grant Program, State Energy, Conversation Office (SECO), Texas, Budget: $100,764. (PI: Semih Aslan; Co-PIs: Hassan Salamy, Bahram Asiabanpour and Jesus Jimenez). 2013.

[12] "Performance Testing for Virtualized Environments", ZNYX Networks, INC, Budget: $122,000. (PI: Stan McClellan; Co-PIs: Wuxu Peng, Hassan Salamy and Semih Aslan). 2012-2014.

[13] "Electronics Testing System", Thermon Inc., San Marcos, TX, Amount: Budget: $2000. (PI :Aslan, S. , CoPI :Asiabanpour, B.), Thermon, 2012.

[14] "Xilinx FPGA Software and Hardware for Classroom and Research Lab", Xilinx Inc., San Jose, CA, Amount: $81,806 (non-cash), (PI: Semih Aslan), 2012-2015

[15] "ImpulseC HLS Software for Classroom and Research Lab", Impulse Accelerated Technologies, Bellevue, Washington, Amount: $16,000 (non-cash), (PI: Semih Aslan), 2012.

3. Under Review External Grants:

[1] Title: "SMART Connections: Early Awareness, Engagement and Enhanced Preparation for Renewable Energy STEM Careers"
NSF
Budget: $299,704.
Role: PI.
Personnel: Semih Aslan (PI), Bahram Asiabanpour, Jesus Jimenez, Hassan Salamy
Year Submitted: 2016.
Status: Under review

2. Submitted, but not Funded, External Grants and Contracts:

[1] Title: “Sustain, Transform and Reenergize (STAR) S-STEM Students”
NSF
Budget: $591,877.
Role: PI.
Personnel: Semih Aslan (PI), Hassan Salamy, Bahram Asiabanpour. Apan Qasem, Eleanor Close.
Year Submitted: 2014.
Status: Not Funded

[2] Title: “Texas State University Clean Energy Incubator (TSUCEI)”
State Energy Conservation Office (SECO)
Budget: $174,860.
Role: Co-PI.
Personnel: Hassan Salamy (PI), Bahram Asiabanpour, Semih Aslan, Jesus Jimenez, William Stapleton and James Bell.
Year Submitted: 2014.
Status: Not Funded

[3] Title: “REU Site: Renewable Energy Generation and Water Desalination by Graphene-Based Technologies”
NSF REU
Budget: $280,000.
Role: Senior Personnel.
PI: Bahram Asianbanpour; Co-PI: Qinkai Yu; Other Senior Personnel: Hassan Salamy, Maggie Chen and Hassan Salamy.
Year Submitted: 2014.
Status: Not Funded

[4] Title: “CyberSEES: Type 1: A Holistic Technical and Educational Approach to a Smart Autonomous flood warning system”
NSF - CyberSEES
Budget: $269,216.
Role: Co-PI.
Personnel: Hassan Salamy (PI), Bahram Asiabanpour, Semih Aslan, Jesus Jimenez, Vijay Anand (from Southeast Missouri State University),
Year Submitted: 2014.
Status: Not Funded.

[5] Title: “Strong Roots: Empowering Students through Engineering-Agriculture Cross-Disciplinary Collaboration in Sustainability”
USDA-HIS
Budget: $298,350.
Role: Co-PM.
Personnel: Bahram Asiabanpour, Hassan Salamy, Semih Aslan, Ken Mix, Araceli Ortiz, Jesus Jimenez, Qingkai Yu
Year Submitted: 2014.
Status: Not Funded

[6] Title: “Green Connections: Early Awareness, Engagement and Enhanced Preparation for Renewable Energy STEM Careers.”
NSF – IUSE
Budget: $315,045.
Role: Co-PM.
Hassan Salamy, Bahram Asiabanpour, Semih Aslan, Araceli Ortiz, Jesus Jimenez
Year Submitted: 2014.
Status: Not Funded

[7] Title: “Texas State University Next Generation STEM/Energy Camp”
Texas Governor’s Science and Technology Champions’ Academy
Budget: $100,000.
Role: Co-PM.
Personnel: Bahram Asiabanpour, Susan Romanella, Semih Aslan, Harold Stern, William Stapleton, and Jesus Jimenez.
Year Submitted: 2013.
Status: Not Funded

[8] Title: “Green Energy Education for a Higher Cause”
NSF Research in Engineering Education (REE).
Budget: 235,835.
PI: Hassan Salamy
Co-PIs: Bahram Asiabanpour, Araceli Ortiz, Semih Aslan, and Jesus Jimenez.
Year Submitted: 2013.
Status: Not Funded

[9] Title: “REU Site: Renewable Energy Generation and Water Desalination by Graphene-Based Technologies”
NSF REU
Budget: $270,484.
Role: Senior Personnel.
PI: Bahram Asianbanpour; Co-PI: Qinkai Yu; Other Senior Personnel: Hassan Salamy, Maggie Chen, and Semih Aslan.
Year Submitted: 2013.
Status: Not funded.

[10] Title: “POWER-ME: Pipeline to Oil World Resources via Mentoring and Education”
Halliburton Foundation
Budget: $29,900.
Project Manager: Tongdan Jin Co-Project Manager: Harold Stern, Semih Aslan, Bahram Asiabanpour, Jitendra Tate, Suan Romanella, Apan Qasem, Luyi Sun, Francis Mendez.
Year Submitted: 2013.
Status: Not funded

[11] Title: Design and Development of Precision Panting Equipment”
NineSigma
Budget: $42,095.
PI: Bahram Asiabanpour, Co-PI: Semih Aslan.
Year Submitted: 2012.

Status: Not funded

3. Funded Internal Grants and Contracts:

[1] Texas State University, 2011, PI (Asiabanpour, B.), CoPI (Aslan, S.), "Upgrading Texas State Victory Star Sign", Annual Giving Coordinator & Family Association, Texas State University, San Marcos, TX, Amount: $10,000, *A comparable offer was made for $120,000 by a private company.

4. Submitted, but not Funded, Internal Grants and Contracts:

[1] Title: "Interactive MRI-based Educational Software for Learning and Teaching Brain-Anatomy", Research Enhancement Program (REP)
Budget = $15,200.
Role: PI.
Year: 2014-2015.
Status: Not Funded.

D. Fellowships, Awards, Honors:

[1] Award of Distinction, World Embedded Software Contest, Seoul, South Korea (2009)
[2] Second Place, Illinois Institute of Technology University-wide Poster Competition (2009)
[3] First Place, Illinois Institute of Technology Computer Engineering Doctoral Student Poster Competition (2008)

IV. SERVICE

A. Institutional

1. University:

[1] Mentor

- H-LSAMP (Agoro, Yusuf O): Fall 2015.
- SPARK (Marissa Downey): Spring 2015.
- SPARK (Marissa Downey, Alex Tejada, Edna lemma, Christian Guerrero) Fall 2015.
- SPARK (Marissa Downey, Alex Tejada, Edna lemma, Christian Guerrero) Spring 2016.
- H-LSAMP (Agoro, Yusuf O): Spring 2016.
- SPARK (Alex Tejada, Edna lemma, Christian Guerrero) Fall 2016.
- H-LSAMP (Agoro, Yusuf O): Fall 2016.

[1] WISE Committee 2014
[2] Graduation, August 2012, May 2013, May 2014, May 2015, Summer 2016.
[3] Discover Texas, 2012
[4] Bobcat BEST Robotics competition judge, 10/29/2011
[5] Bobcat BEST Robotics competition kickoff meeting, 9/17/2011

2. College:

[1] College Scholarship Committee representative, 2013, 2014, 2015, 2016
[2] College Scholarship Committee Chair, 2015, 2016

3. Department/School:

[1] EE Search Committee, 2016, 2017
[2] Bobcat Day, Saturday 4/13/2013
[3] Bobcat Day, Saturday 11/19/2011

[4] Graduate Thesis Advisor

- Pooria Dehghanian, 2016-2017.
- Mohammad Azim Ul Ekram, 2016-2017.
- Priyanka Kenche, 2016-2017.
- Raghu Krishnappa, 2016-2017.
- Dinesh Kumar Murthy, 2016, 2017.
- Karuna Ranganathapura Chandrai G, 2016, 2017.

[5] Senior Project Advisor

- Orion Heat Shield Spectrometer Software Application, L. F. Williams, J. Meehan, S. Starnes, Sponsored by NASA, 2016.
- NXP Semiconductor Hexiwear Sensor IoT, Dean Britt, Sponsored by NXP, 2016.
- NXP Sun Tracker Resources, W. Burdick, R. Kim, E. Bazan, Sponsored by Freescale, 2016.
- Temperature Signal Simulator, T. Nash, T. Howell, R. Perez, V. Pinones, Sponsored by Emerson 2015.
- Networked orientation sensor (magnetic), P. Quintanilla, J. Richardson, J. Cortes Sponsored by Freescale, 2015.
- Implementation of a Demodulator, C. Cox, N. Govea , J. Rodriguez, Sponsored by FlexRadio Systems, 2015.
- Wrist-Worn Wellness Watch, T. Honeywill, V. Melnikov, G. Fuller, Sponsored by Texas Instruments, 2014.
- Golf Swing Analyzer, D. Getman, J. Estrella, E. Musgrave, J. Silva, Sponsored by Texas Instruments, 2014.
- Market Analysis of Stadion: Distance Measuring Discus, C. Alvarez, E. Chavez, D. Taki, Sponsored by Texas State University, 2013.
- Optimal Design of Small Wind Turbines Blades through Design of Experiment (DOE), P. Allers, M. Andrews, M. Pozos, I. Rosas, Sponsored by Texas State University, Co-advised with Dr. Asiabanpour, 2012.
- Micro-Controlled Reconfigurable Fall Warning System - For Hospital Applications, J. Acosta, B. Bartosh, S. Nelson, Sponsored by Texas State University, 2012.
- C# Based Panel Testing System, M. Prado, T. Carona, Sponsored by Thermon, 2012.
- Texas State Victory Star, M. Quiroz, D. Santikos, D. Gagliano, Sponsored by Texas State University, 2011.

B. Professional:

[1] Editorial Board: Parallel & Cloud Computing Journal, 2015 - current.

[2] Editorial Board: MAYFEB Journal of Electrical and Electronic Engineering, 2016 - current.

[3] Journal Reviewer: Circuits and Systems, Scientific Research.

[4] Journal Reviewer: Sustainable Computing, Informatics and Systems, Elsevier.

[5] Journal Reviewer: The IEEE Signal Processing Letters.

[6] Journal Reviewer: Parallel & Cloud Computing Journal.

[7] Journal Reviewer: The IEEE Transactions Instrumentations and Measurements.

[8] Journal Reviewer: Journal of Sensor Technology, Scientific Research Publishing.

[9] Journal Reviewer: American Journal of Engineering Education (AJEE).

[10] 2013 Open Server Summit Session Chair.

[11] 2013 IEEE Midwest Conference Session Chair.

[12] 2013 IEEE Midwest Conference Reviewer.

[13] 2013 IEEE International Instrumentation and Measurement Technology Conference Session Chair.

[14] 2012 IEEE Midwest Conference Session Chair.

[15] NSF grant proposal project advisory committee member, working with Illinois Institute of Technology, 2014.

[16] NSF grant proposal project advisory committee member, working with Southeast Missouri State University, 2014.

[17] Cyber security advisory committee member, Southeast Missouri State University, 2014 - current.

[18] Panelist: Department of Defense (DoD) SMART Scholarship Evaluation Panel, 2016.

C. Community:

D. Service Honors and Awards:

[1] Alpha Chi National Collage Honor Society, Favorite Professor, 2016.

[2] Graduating Student Recognition Program

- Fall 2015
  - Cody Lovejoy
  - Javier Rodriguez
  - Monique Jones
- Spring 2015
  - Brian Samuels
  - Samuel Pesek
- Spring 2014
  - Keegan Sterling

E. Organizations:

[1] IEEE Senior Member

[2] ASEE Member

F. Service Grants and Contracts

1. Funded External Service Grants and Contracts:

2. Submitted, but not Funded, External Service Grants and Contracts:

3. Funded Internal Service Grants and Contracts:

4. Submitted, but not Funded, Internal Service Grants and Contracts: