

**Ehsan Sheybani, Ph.D.**

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**EDUCATION**

Ph.D. EE University of South Florida 2002  
Research Topic: ATMTN - A High-Speed Telemammography Network  
Architecture MSEE Florida State University 1992  
Research Topic: Laser Image Processing in Under-Water Turbid Environment  
BSEE University of Florida 1989

**ACADEMIC EXPERIENCE**

Assistant Professor, Information Systems and Decision Science, University of South Florida, Sarasota, Florida August 2016-Present  
Teaching and Research Topics: Applied Information Systems and Technology in Scientific Computing, Data Sciences, and Decision Making. Applications of Information Systems, Data Sciences, and Signal Processing in Cyber Security, GIS/RS, Big Data, Nanotechnologies, Advanced Manufacturing, Embedded Systems, Biomedicine, WSN, System Health, SAR, Bioinformatics, Oceanography, Modeling/Simulation, Data Mining, Visualization, Vibration, RF Communication, Smart Robots, Telecom/Networks, Video Game Design, and Video/Data/Speech/Image Processing.

Full/Associate/Assistant Professor (Tenure Track), Computer Engineering, Virginia State University Petersburg, Virginia 2004/2009/2013-Present  
Teaching and Research Topics: Computer Science and Engineering, Electrical Engineering, and Biomedical Engineering courses and labs. Applications of Communication and Signal Processing Filters in Cyber Security, GIS/RS, Big Data, Nanotechnologies, Advanced Manufacturing, Embedded Systems, Biomedicine, WSN, System Health, SAR, Bioinformatics, Oceanography, Modeling/Simulation, Data Mining, Visualization, Vibration, RF Communication, Smart Robots, Telecom/Networks, Video Gaming, and Video/Data/Speech/Image Processing.

Assistant Professor (Tenure Track), SET/EET, University of Southern Mississippi Hattiesburg, Mississippi 2003-2004

Assistant Professor (Tenure Track), IET, Morehead State University Morehead, Kentucky 2002-2003

Assistant Professor (Tenure Track), CS/CIS/MIS, Hillsborough Community College DM/YB Campuses, Tampa, Florida 1999-2002

Visiting Lecturer, Research Associate, Graduate Research/Teaching Assistant in the Departments of Electrical Engineering, Oceanography and Marine Sciences, and the Digital Medical Imaging Program, Dept. of Radiology, H. Lee Moffitt Cancer Center & Research Institute at the University of South Florida Tampa, FL 1992-2000

CS/CIS/MIS/BSET Instructor/Chairperson, Tampa Technical Institute Tampa, FL 1996-

Graduate Research/Teaching Assistant,  
Florida State University, Tallahassee, FL 1989-1992

**INDUSTRIAL EXPERIENCE**

Technical Consultant, Trainer and Contractor, Sean and Associates  
Tampa, Florida 1997-  
2004

Network Engineer/Internet Application Developer, BellSouth Corporation  
BSIWS, Tampa, FL 1997-1999

Hardware/Software Design Engineer, Siemens Telecom  
Lake Mary, FL 1987-1989

**CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

IEEE (GRSS, EMB, SP, COMM, COMP, EDU), ASEE, NRA, TRA

**CERTIFICATIONS OR PROFESSIONAL REGISTRATIONS**

- x Chair, Vice Chair, Secretary, and Member – Several IEEE Sub-Committees on Ethics in Engineering Education
- x Senior Member – IEEE Communications Society
- x Senior Member – IEEE Geosciences and Remote Sensing Society
- x Senior Member – IEEE Engineering in Medicine and Biology Society
- x Senior Member – IEEE Signal Processing Society
- x Senior Member – IEEE Education Society
- x Member – American Society for Engineering Education
- x Licensed Member – National Rocketry Association
- x Licensed Member – Tripoli Rocketry Association

**HONORS AND AWARDS**

| Type of Award  | Awarded by                            | Date Received |
|--|---------------------------------------|---------------|
| Senior Membership, Lifetime Member                       | IEEE International Organization       | 2012-Present  |
| WTS Excellence in Service Award                          | IEEE WTS                              | 2010-Present  |
| Licensed Member  | National Association of Rocketry      | 2012-Present  |
| Licensed Member  | Tripoli National Rocketry Association | 2012-Present  |
| Who's Who in Medicine and Healthcare                     | Who's Who In America                  | 2004-Present  |
| Who's Who in Engineering and Technology, Lifetime Member | Strathmore's Who's Who                | 2008-Present  |
| Certificate of Award – Favorite Teacher                  | MSEIP Grant                           | 2007-2008     |

**SERVICE ACTIVITIES**

Ehsan Sheybani

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Reviewer (Proposals, Books, and Articles), NSF, NASA, IEEE, ACM, ASEE, ETD, NAIT, IASTED, NIH, DoD/NSF (NDSEG, SMART), ACTA Press, Thomson Learning

Member, DoD IVTT Steering Committee

Member, IEEE (GRSS, EMB, SP), ACM, ASEE

Member, VSU Computer Engineering Industrial Advisory Committee (student, faculty sub-committees)

Member, VSU Computer Engineering Research, ABET Accreditation, Student Practice Company, and Library Committees

Member, VSU General Education Committee

Member, VSU Engineering Grievance Committee

Chair/Member, VSU Engineering Faculty Hiring Committee

Member, VSU Faculty Development Advisory Board

Member, VSU Faculty Commencement Marshal

Member, VSU Faculty Senate

Member, VSU DE Planning Teams

Member, VSU Faculty Senate Sub-Committee

Member, Collaborative VSU-ISB Training Group for Systems Biology Tools and Applications

Member, International Program Committee, IASTED Technical Education, TeleHealth, Education and Technology

Chairman/Moderator, Biomedical Image Processing, IASTED, ASEE

Mentor/Advisor, Deep South Network for Cancer Control

TPC/Track/Session Chair, IEEE/ACM/WTS 2006-2010

Judge, School Science Fair

Member, F38 UAV Standards Committee

Member, USF HSNR, ICE-T, and DMIP

Participant, Richmond Joint Engineers Council (RJEC)

## **PUBLICATIONS**

### **Recent Journal Articles**

1. G. Javidi, E. Sheybani, D. Mason, "Visualization of Real-time Radar Data by Integration of X-Band Software", ACM-IJITN, 2014.
2. G. Javidi, E. Sheybani, J. Williams, "Development of a Satellite Communication Emulator for the Hyperspectral Microwave Atmospheric Sounder (HyMAS)", ACM-IJITN, 2014.
3. G. Javidi, E. Sheybani, "Teaching Computer Programming through Game Design: A Game-First Approach", GSTF JoC, Vol 4 No 1, 2014.
4. E. Sheybani, L. Ralph, G. Javidi, A. Eslami, J. Luttamaguzi, "SNMP-Based RMA Analysis of Wired and Wireless Networks" ACM-IJITN, 5.3, pp. 49-53, 2013.
5. G. Javidi, E. Sheybani, "Improving Students' Skills, Knowledge and Abilities in Computer Programming: A STEM Project", CCSC-SE, November 2013.

### **Recent Conference Proceedings**

1. J. Luttamaguzi, D. M. Brooks, A. Eslami, E. Sheybani, G. Javidi, P. M. Gabriel, "Using Simulations and Computational Analyses to Study a Frequency-Modulated Continuous-Wave Radar", presented in 11th international conference on excellence in education, July 7-10, 2014, Paris, France.
2. G. Javidi, E. Sheybani, "Validation of a Course for Video Game Design Training", Proceedings of the ACM CGAT 2014, March 24-25, 2014, Singapore.
3. Giti Javidi, Ehsan Sheybani, Danielle Mason, "Real-time Radar Data Visualization", Proceedings of the 2014 International Conference on Modeling, Simulation and Visualization Methods, July 21-24, 2014, Las Vegas, Nevada.
4. Ehsan Sheybani, Giti Javidi, "Smart Wireless Sensor Networks", Proceedings of 4th U-World-2014, June

19-21, 2014, Dalian, China.

5. Jamiiru Luttaguzi, Ka'Ren Byrd, Akbar Eslami, Giti Javidi, Ehsan Sheybani, "Simulated Spaceborne Numerical Convergence Study", Proceedings of the 2014 International Conference on Modeling, Simulation and Visualization Methods, July 21-24, 2014, Las Vegas, Nevada.
6. Javidi, G.; Sheybani, E.; "Game Design as a Motivation for High School Students to Learn Programming" Proceedings of ACM SIGCSE 2014, March 5-8, Atlanta, GA.
7. E. Sheybani, S. Garcia, G. Javidi, "Digital Image Processing in Surface Engineering Quality Control", Proceedings of the 2014 International Conference on Image Processing, Computer Vision & Pattern Recognition, July 21-24, 2014, Las Vegas, Nevada.
8. Jamiiru Luttaguzi, Ka'Ren Byrd, Akbar Eslami, Ehsan Sheybani, and Giti Javidi, "Case Study: Numerical Convergence Study on Simulated Spaceborne Microwave Radiometer Measurements of Earth", Proceedings of ASEE 2013, June 23-26, Atlanta, GA.
9. J. Luttaguzi, D. M. Brooks, A. Eslami, E. Sheybani, G. Javidi, P. M. Gabriel, "The Application of fast Fourier Transforms on Frequency-Modulated, Continuous-Wave Radars", Proceedings of ASEE 2013, June 23-26, Atlanta, GA.
10. Akbar Eslami, James Lee Jr, Henry Mishoe, Manohar Deshpande, Jamiiru Luttaguzi, Ehsan Sheybani, "Development of Wideband Dual Polarized of Microstrip Antennas for Microwave Remote Sensing", Proceedings of SPACOMM 2013, April 21-26, Venice, Italy.
11. K. Hendricks, E. Sheybani, "Advanced Traffic Warning System", Proceedings of the HBCU-UP Conference, April 2014, Petersburg, VA.
12. J. Culley, E. Sheybani, "Pothole Detection System", Proceedings of the HBCU-UP Conference, April 2014, Petersburg, VA.
13. G. Javidi, E. Sheybani, D. Mason, "Visualization of Real-time Radar Data by Integration of X-Band Software", Proceedings of IEEE WTS, April 2014, Washington, DC.
14. G. Javidi, E. Sheybani, J. Williams, "Development of a Satellite Communication Emulator for the Hyperspectral Microwave Atmospheric Sounder (HyMAS)", Proceedings of IEEE WTS, April 2014, Washington, DC.
15. Talaiver, M.; Javidi, G.; Sheybani, E.; Yang, S.; "Inspiring High School Students through STEM Exploration" Proceedings of SITE 2013, March 21-25, New Orleans, LA.
16. K. Parks, E. Sheybani, "Traffic Sign Recognition", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
17. X. Collier, E. Sheybani, "Linux: Play Station 3", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
18. M. Campbell, E. Sheybani, "Comparing and Contrasting Windows 7 and Windows 8 File Systems", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.

### **Recent Poster Presentations**

1. C. Young, G. Javidi, E. Sheybani, "Space Geodesy Project", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
2. A. Hopkins, G. Javidi, E. Sheybani, "Very Long baseline interferometry (VLBI)", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
3. C. Brown, G. Javidi, E. Sheybani, "Satellite Detection through USRP", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
4. B. Harrington, G. Javidi, E. Sheybani, S. Garcia-Otero, "Signal Processing With USRP", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
5. M. Campbell, G. Javidi, E. Sheybani, "Universal Software Radio Peripheral Radar GPS Receiver", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.

### **Recent Undergraduate Research Conference Proceedings (NASA GSFC STEM Research)**

1. P. Fon, E. Sheybani, S. Garcia-Otero, "Ecosar: Synthetic Aperture Radar Development", Proceedings of ERN Conference 2014, Washington, DC.

2. J. Holmes, E. Sheybani, S. Garcia-Otero, "Miniature Fourier Transform Spectrometer", Proceedings of ERN Conference 2014, Washington, DC.
3. B. Megna, E. Sheybani, S. Garcia-Otero, "Autonomous Robot", Proceedings of ERN Conference 2014, Washington, DC.
4. C. Young, G. Javidi, E. Sheybani, "Software Defined Radio Implementation of a Fourier Transform: S-DRIFT", Proceedings of ERN Conference 2014, Washington, DC.
5. A. McCaw, E. Sheybani, "Speech to Text Converter", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
6. J. Williams, G. Javidi, E. Sheybani, "Hyperspectral Microwave Atmospheric Sounder Emulator", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
7. L. Ralph, G. Javidi, E. Sheybani, "Characterizing Performance of SNMP Monitor and Control Interfaces", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.

## **OTHER PUBLICATIONS**

### **Undergraduate Research:**

1. G. Javidi, E. Sheybani, "Improving Students' Skills, Knowledge and Abilities in Computer Programming: A STEM Project", Twenty-Seventh Annual Consortium for Computing Sciences in Colleges, Southeastern Conference, Furman University, Greenville, SC, November 15-16, 2013.
2. Campbell, M.; Johnson, B.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Universal Software Radio Peripheral Radar Transmission", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
3. Hopkins, A.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Integrating Software Defined Radio with USRP", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
4. Young, C.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Software Defined Radio Implementation of a Fourier Transform S-DRIFT", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
5. White, K.; Kongpop, U.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Temperature Sensor and Feedback Control for a Cryogenic detector refrigeration system", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
6. Megna, B.; Hosler, J.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Autonomus Robot", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
7. Holmes, J.; Aslam, S.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Miniature Fourier Transform Spectrometer", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
8. Dirksen, E.; Aslam, S.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Fourier Transform Spectrometer", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
9. Fon, P.; Perrine, M.; Zimmerman, R.; Spartana, N.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "ECOSAR: Synthetic Aperture Radar Development", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
10. Culley, J.; Hilliard, L.; Back, J.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Hyperspectral Microwave Atmospheric Sounder", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
11. Bobby Mote, M. Cowell, E. Thompson, and E. Sheybani, "Design and Implementation of Air Quality Sensor on the Arduino Uno Development Platform", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
12. Javon Blunt, K. Clark, E. Sheybani, "Temperature Controlled Fan", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
13. Shawn Mull, M. Thornton, E. Sheybani, "FPGA based home security system", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.

14. Myishia Cowell, E. Sheybani, "Advancements in Holography", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
15. Rasaan Allen, and E. Sheybani, "Android 4.0 Ice Cream Sandwich", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
16. Kendra Parks, and E. Sheybani, "IPAD 3", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
17. Marcus Washington, and E. Sheybani, "iPhone 4s: Is It the Best Phone Created? ", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
18. Meesha Rashidi, and E. Sheybani, "iPhone 5 Hologram", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
19. Valdis Wallace, and E. Sheybani, "Perendev Motor", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
20. Carla Gorosito, and E. Sheybani, "PrintBrush: Pocket-Sized Printer", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
21. Bryan Johnson, and E. Sheybani, "PS3", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
22. Ray McAlmont, and E. Sheybani, "The Future of Smart Tablets: Apple vs. Competitors", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
23. Michael Sanders, and E. Sheybani, "The iPhone 5", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
24. Monique T. Williams, and E. Sheybani, "The Play Station Vita", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
25. Tavon Robinson, and E. Sheybani, "The RollTop Computer", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
26. Derrick Robinson, and E. Sheybani, "Using Living Cells as Computer Nodes", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
27. LaTasha Ralph, and E. Sheybani, "Wifi Cufflinks", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
28. Nick Rashidi, M. Rashidi, and E. Sheybani, "Advancement of NASA Project AQUA with New JAXA G-Com Satellite Technology", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
29. Kasan Turner, and E. Sheybani, "Apollo Missions", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
30. Kamarr Holligan, O. Paul, and E. Sheybani, "Aura: The Atmosphere Shield", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
31. John Culley, C. Colendrino, and E. Sheybani, "Cleaning Up Space", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
32. Bobby Mote, E. Glover, D. Legette, and E. Sheybani, "Enabling Faster Space Travel through Plasma-based Propulsion", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
33. Natasha Sheybani, and E. Sheybani, "Moon vs. Mars Colonization", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
34. Latasha Ralph, J. Holmes, T. Banks, and E. Sheybani, "NASA AQUA Mission", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
35. Kendra Parks, D. Robinson, T. Robinson, and E. Sheybani, "NASA Mars Rover: Curiosity", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
36. Timothy Fowler, and E. Sheybani, "NASA Space Robots", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
37. Shawn Mull, M. Thornton, B. Johnson, and E. Sheybani, "Robonaut 2", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
38. Mohammad Khan, and E. Sheybani, "Sample Analysis at Mars", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.

39. Christine Saywack, and E. Sheybani, "Satellite Research and the Search for Alternative Energy", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
40. Evvarey Thompson, and E. Sheybani, "Space Robots", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
41. Daniel Holmes, K. Williams, and E. Sheybani, "Space Travel through Plasma-based Propulsion", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.

42. Randal Ward, and E. Sheybani, "Sample Analysis The Hubble Space Telescope", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
43. Nevil Kabrawala, and E. Sheybani, "NASA's Success in the International Space Station", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
44. Macy Smith, and E. Sheybani, "Android: The New Breed", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
45. Rasaan Allen, Myishia Cowell, and E. Sheybani, "Honeycomb OS of the Future", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
46. Bobby Mote, and E. Sheybani, "Improving Flexibility and Application Adaptability in Embedded Systems through Dynamic Configuration of Embedded Operating Systems", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
47. Evvarey Thompson, V. Garcia, and E. Sheybani, "Malicious Malware!", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
48. Darrell Payne, O. Paul, and E. Sheybani, "Linux Operating System", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
49. Vandy Jones, K. Holligan, and E. Sheybani, "Virtualization: The Next Big Thing", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
50. Frank Pinto and A. Hall, and E. Sheybani, "The Google Chrome OS Cr-48", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
51. EvVarey Thompson, and E. Sheybani, "The Design and Development of a Portable Potentiostat", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
52. Kyalik Clark, and E. Sheybani, "The New Age of Technology", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
53. Derrick Brown, and E. Sheybani, "Android Operating System", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
54. Adrian Lamb, and E. Sheybani, "Editable HTML Operating System User Interface", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
55. Mathew Singleton, Omar Dancey, and E. Sheybani, "No Guts, No Glory", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
56. Cedrick Kwindja, and E. Sheybani, "Operating System of an iPod", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
57. Myishia Cowell, and E. Sheybani, "The Creation of a Standard Operating Procedure for the QC5000 Printed Circuit Boards", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
58. Daniel Holmes, and E. Sheybani, "The Samsung Omnia i910 Windows Mobile", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
59. Dwayne Waddey Jr., E. Blakeney, and E. Sheybani, "A New Way to Shop", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
60. Joseph Johnson, C. Willis and M. Westbrook, and E. Sheybani, "Fingerprint Recognition", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
61. Oneil Paul and V. Jones, and E. Sheybani, "LabVIEW 8 & Speedy 33 (Digital Signal Processing)", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
62. Eric Blakeney, and E. Sheybani, "Radio Frequency Identification (RFID)", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
63. Terrell Jones, and E. Sheybani, "Radio Frequency Identification: A New Look on Life", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
64. Tierra Elmore, and E. Sheybani, "The Hidden Node", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
65. Brandon Miller, and E. Sheybani, "The History of DVDs", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.



66. Mike Westbrook, and E. Sheybani, "TiVo Series3", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
67. Conrad Willis, and E. Sheybani, "Wars and Progress in Technology", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
68. Sean Turner, and E. Sheybani, "3D Processor Chips", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
69. Mohammad Z. Khan, and E. Sheybani, "Digital TV Transition", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
70. Andrea Thomas, and E. Sheybani, "Hot Music", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
71. Asheli Cherry, and E. Sheybani, "Lights On", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
72. Adrian Lamb, and E. Sheybani, "Making the Operating System Yours", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
73. Algernon Evans, A. Pierre, B. Brown, and E. Sheybani, "Motion-Sensor Side-View Mirror", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
74. Clarence Williams, Jr., C. Gaie, B. Miller, and E. Sheybani, "Robot Medical Assistant", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
75. Rashe Dean, K. King, and E. Sheybani, "Sonar Fishing Lure with LED light", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
76. Tona Booker, Amari Long, Christopher Oliver, Dr. Ehsan Sheybani, "Exploring the past, present and future of the hard drive", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
77. Clarence Williams, Algernon Evans, Charles Gaie, Dr. Ehsan Sheybani, "Past, Present, and Future of the USB Drives", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
78. Anthony Gitalado, Nadine Jerome, Dr. Ehsan Sheybani, "The Future of CD/DVD Players", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
79. Amos Pierre, Benjamin Brown, Jamal Norcome, Dr. Ehsan Sheybani, "Past, Present, and Future of Random Access Memories (RAM)", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
80. India Young, Brandon Miller, Dr. Ehsan Sheybani, "Microprocessors: past, present and future", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
81. C. Green, L. Crawley, K. Mason, T. Booker, E. Sheybani, G. Slaughter, "Sense-O-Matic Cane", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
82. Gitalado, Y. Campbell, C. Oliver, L. Smith, E. Sheybani, G. Slaughter, "Battery Health Indicator System", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
83. Green, L. Crawley, K. Mason, T. Booker, E. Sheybani, G. Slaughter, "Sense-O-Matic Cane", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
84. Gitalado, Y. Campbell, C. Oliver, L. Smith, E. Sheybani, G. Slaughter, "Battery Health Indicator System", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
85. Yohance Campbell, Ehsan Sheybani, and Shobha Sriharan, "Application of Remote Sensing Technology in Assessment of Coastal and Urban Flooding from Katrina", VSU, HBCU UP / NSF Program, Annual Undergraduate Research Conference, April 6, 2007.
86. F. Rodman, E. Sheybani, Y. Campbell, "Remote Sensing of Flood Damage Assessment", Proceedings of HBCU-UP National Research Conference, Washington, DC, October 4-7, 2007.
87. L. Cox, G. Javidi, L. Bryan, E. Sheybani, "Computer Visualization Algorithms for Proteomics Studies in Cancer", Proceedings of HBCU-UP National Research Conference, Washington, DC, October 4-7, 2007.

88. Sheybani, E., Javidi, G., Hardy, M., Denton, L., Campbell, Y.; "Enhancing Research Capacity and Developing Wireless Communications Curriculum for Students in Computer Science and Engineering", Proceedings of IEEE/SECon 2007, Richmond, VA, March 22-25 2007.
89. Sheybani, E., Javidi, G., Wanta, S., Rankin, W.; "Establishment of Global Multinode Teleconferencing Environment Infrastructure for Research and Education", Proceedings of IEEE/SECon 2007, Richmond, VA, March 22-25 2007.
90. Sheybani, E., Wimbush, C., Sriharan, S., "Genomic Signal Processing for Cancer Detection", Proceedings of ICC 2006, Washington, DC, April 2006.
91. Sheybani, E., Wimbush, C., Sriharan, S., "Genomic Signal Processing", Proceedings of ABRCMS 2005, Atlanta, GA, October 2005.

### **Journals and Conferences:**

1. E. Sheybani, "Wireless autonomous devices: Dimensionality Reduction and Noise Removal in Wireless Autonomous Devices", Academy Publishers, June 2012 (in press).
2. E. Sheybani, "Wireless Sensor Networks - Technology and Applications: An Algorithm for Denoising and Compression in Wireless Sensor Networks", InTech Publishers, July 2012, (in press).
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144. Sheybani, E., Sankar, R.; "ATMTN: An Ultra-High-Speed Telemammography Network Architecture", Washington University Gigabit Network Kits Workshop, January 2000.
145. Sheybani, E., Sankar, R.; "Matching Pursuit-Based Compression for Telemammography", IEEE SouthEastCon, Orlando, Florida, 1999.
146. Sheybani, E., Sankar, R., "A New Compression Algorithm for Mammography Images", IEEE SouthEastCon, Tampa, Florida, 1998.
147. Sheybani, E., Chiou, Y. L., "Extraction of Fowler-Nordheim tunneling parameters from I-V characteristics of thin gate-oxides", 185th meeting Electrochemical Society, San Francisco, CA, May 1994.
148. Sheybani, E., Chiou, Y. L., "Analyzing the I-V characteristics of thin gate-oxides using multiple regression", IEEE SouthCon, Orlando, FL, March 1994.
149. Sheybani, E. and Arora, K., "Measurement of temporal coherence loss in laser light scattered from simulated coastal waters", IEEE SouthEastCon, Charlotte, NC, April 1993.
150. Sheybani, E., "Coherence of laser signal in turbid water", International Conference on Laser Applications and Theories, Tehran, Iran, August 1993.
151. Sheybani, E., "Coherence loss measurement of laser signal", International Conference on Laser Applications and Theories, Tehran, Iran, August 1992.
152. G. Wimbush, E. Sheybani, G. Javidi, "Virginia State University Pre-college Readiness and Enrichment Program (VSU MSEIP PREP)", Submitted to DEd/MSEIP, March 2008.
153. M. Talaiver, E. Sheybani, G. Javidi "DIGISPIRED: Digital Inspiration for Video Game Design and Programming", Submitted to NSF/ITEST, February 2008.
154. E. Sheybani, "Genomic Signal Processing for Early Cancer Detection", Submitted to DoD/UNCF Special Programs, May 2007.
155. G. Wimbush, E. Sheybani, G. Javidi, "Virginia State University Pre-college Readiness and Enrichment Program (VSU MSEIP PREP)", Submitted to DEd/MSEIP, March 2007.
156. E. Sheybani, G. Javidi, "Establishment of Global Multinode Teleconferencing Environment Infrastructure for Research and Education at VSU", Submitted to VSU Provost's Office, April 2006.
157. E. Sheybani, G. Javidi, "Enhancing Research Capacity and Developing Wireless Communications Curriculum for Students in Computer Science and Engineering", Submitted to VSU Provost's Office, April 2006.
158. Sheybani, E., "Software Installation Procedures for the WUGS ATM Switch", Submitted to the Department of Electrical Engineering, University of South Florida, May 2002.
159. Sheybani, E., "Region of Interest Compression Algorithms", Submitted to the Department of Electrical Engineering, University of South Florida, May 2002.
160. Sheybani, E., "Digital Imaging and Communications in Medicine (DICOM) Algorithms for Telemammography", Submitted to the Department of Electrical Engineering, University of South Florida, May 2002.
161. Sheybani, E., "A Survey of Telemedicine/Telemammography Network Architectures", Submitted to the Department of Electrical Engineering, University of South Florida, May 2002.
162. Sheybani, E., Weisberg, R. H., Jain, V. K., Snider, A. D., "Research Report: Apalachicola Bay Data Set 1992-1994", North West Florida Water Management District (NFWMD), September 1995.
163. E. Sheybani, G. Javidi, A. Eslami, "Development of Super-Resolution Synthetic Aperture Radar (SAR) Image Processing Techniques in a Framework of Undergraduate Research, Training, and Outreach", Annual report submitted to NASA NSTI, August 2012.
164. E. Sheybani, "NASA USLI Grant", Annual report submitted to NASA, August 2012.
165. E. Sheybani, "NASA Faculty Student Research Fellowship Grant", Annual report submitted to NASA, May 2011.
166. S. Garcia-Otero, E. Sheybani, "Curriculum Improvement Partnership Award for the Integration of

- Research”, Annual report submitted to NASA CIPAIR, May 2012.
167. S. Garcia-Otero, E. Sheybani, “Curriculum Improvement Partnership Award for the Integration of Research”, Annual report submitted to NASA CIPAIR, May 2011.
168. Hill, O., Javidi G., Sheybani E., Serpel Z., and Faison O. “Assessing the Efficacy of Cognitive Training on the Mathematics and Science Performance of Minority Students”, Annual report submitted to NSF/ITEST/REESE, February 2012.
169. Hill, O., Javidi G., Sheybani E., Serpel Z., and Faison O. “Assessing the Efficacy of Cognitive Training on the Mathematics and Science Performance of Minority Students”, Annual report submitted to NSF/ITEST/REESE, February 2011.
170. Talaiver M., Javidi G., Sheybani E., and Yang S. “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Annual report submitted to NSF/ITEST, February 2012.
171. Talaiver M., Javidi G., Sheybani E., and Yang S. “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Annual report submitted to NSF/ITEST, February 2011.
172. Talaiver M., Javidi G., Sheybani E., and Yang S. “DIGISPIRED: Digital Inspiration for Video Game Design and Programming”, Annual report submitted to NSF/ITEST, February 2010.
173. Talaiver M., Javidi G., Sheybani E., and Yang S. “DIGISPIRED: Digital Inspiration for Video Game Design and Programming”, Annual report submitted to NSF/ITEST, February 2009.
174. Talaiver M., Javidi G., Sheybani E., and Yang S. “DIGISPIRED: Digital Inspiration for Video Game Design and Programming”, Annual report submitted to NSF/ITEST, February 2008.
175. G. Wimbush, E. Sheybani, G. Javidi, “Virginia State University Pre-college Readiness and Enrichment Program (VSU MSEIP PREP)”, Submitted to DEd/MSEIP, March 2008.
176. E. Sheybani, “Wireless autonomous devices: Dimensionality Reduction and Noise Removal in Wireless Autonomous Devices”, Academy Publishers, June 2012 (in press).
177. E. Sheybani, “Wireless Sensor Networks - Technology and Applications: An Algorithm for Denoising and Compression in Wireless Sensor Networks”, InTech Publishers, July 2012, (in press).
178. E. Sheybani, “Advanced Applied Mathematics for Real-Time Noise Cancellation”, Springer Proceedings in Mathematics and Statistics, Spring 2012, (in press).
179. M. Lei, D. Song, Y. Yao, R. Sankar, E. Sheybani, and W. Qian, “Medical Image Enhancement Using Fourier Descriptors and Hybrid Filters”, Handbook of Medical Image Processing (2nd Edition), Isaac Bankman (Editor), Academic Press, pp. 57-67, 2008.
180. Aparna Varde, Stephen Bique, Elke Rundensteiner, David Brown, Jianyu Liang, Richard Sisson, Ehsan Sheybani, and Brian Sayre, “Component Selection to Optimize Distance Function Learning in Complex Scientific Data Sets”, Published in Database and Expert Systems Applications of Lecture Notes in Computer Science, Volume 5181/2008, pp: 269-282, Springer Berlin / Heidelberg Publications, 2008. 0302-9743 (Print).
181. G. Javidi, E. Sheybani, “Pedagogical Impact of Visualization on Computer Science Students’ Conceptual Understanding”, Journal of Information Technology and Application in Education (JITAE), Pending corrections.
182. Sheybani, Ehsan; Garcia-Otero, Singli; Adnani, Fedra; Javidi, Giti; Deshpande, Manohar; Memarsadeghi, Nargess, “Validation of a Real-Time Algorithm for Blind Image Quality Assessment”, Submitted to IEEE Transactions on Image Processing, Pending corrections.
183. Wei Qian, Ehsan Sheybani, Yudong Yao, Ravi Sankar, “Image Segmentation for Lung Nodule Detection using Fuzzy Algorithm”, In Progress for Submission.

### PROFESSIONAL DEVELOPMENT

| Title                            | Place                     | Date         |
|----------------------------------|---------------------------|--------------|
| DoD Review Panels (SMART, NDSEG) | Arlington, VA             | 2007-Present |
| Member, VSU STEM School          | Virginia State University | 2012-Present |

|   |   |              |
|---|---|--------------|
| Lab   |   |              |
| Faculty Advisor, VSU Rocket Club  | Virginia State University                                   | 2011-Present |
| Faculty Advisor, VSU Robotics Club  | Virginia State University                                   | 2010-Present |
| Faculty Advisor, VSU IEEE Organization – Student Branch                                 | Virginia State University                                   | 2010-Present |
| Seminars on Wireless Communications   | Virginia State University                                   | 2008-Present |
| Seminars on Digital Signal Processing   | Virginia State University                                   | 2008-Present |
| Senior Membership, Lifetime Member  | IEEE International Organization                             | 2012-Present |
| Licensed/Insured Member   | National Association of Rocketry                            | 2012-Present |
| Licensed/Insured Member   | Tripoli National Rocketry Association                       | 2012-Present |
| Presentation to collaborative Training group for systems biology tools and applications | Virginia state university and Institute for Systems Biology | 2008-2010    |

### **Workshops**

1. IEEE EMB PervasiveHealth 2012 Workshop, Computing Technologies for HealthCare, San Diego, CA, May 21-24, 2012.
2. Image Processing with MATLAB Training Course, Mathworks Online Workshop, March 1-2, 2012.
3. DSP Lab workshop, ASEE, San Antonio, TX, June 10, 2012.
4. IEEE/AAAS STEM leadership and innovation, Washington, DC, 2012.
5. FPGA Design Flow Workshop at Florence-Darlington Technical College in Florence, SC, March 15-16, 2012.
6. SLOAN-C Online Workshop Series: Podcasting in Higher Education: Current Trends and Applications, March 4-13, 2009
7. SLOAN-C Certification Series: Online Teaching Certification Program, April 22-June 26, 2009.
8. NECC 2009 Conference, Washington DC, June 28-30, 2009. Taking Digispired (NSF funded grant) students to this conference to present their video games and participate in a competition.
9. Giti Javidi, Ehsan Sheybani, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Fourth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2008, Arlington, VA. (Mandatory presentation by grant fund recipients).
10. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Fifth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2009, Arlington, VA. (Mandatory presentation by grant fund recipients).
11. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Sixth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2010, Arlington, VA. (Mandatory presentation by grant fund recipients).

12. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Cohort 4, National Science Foundation ITEST Program, Seventh Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2011, Arlington, VA. (Mandatory presentation by grant fund recipients).
13. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Cohort 4, National Science Foundation ITEST Program, Eighth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2012, Arlington, VA. (Mandatory presentation by grant fund recipients).
14. Sheybani, E., “ORAU/NEES supported workshop on earthquake research”, Attended, Atlanta, GA, July 2008.
15. Sheybani, E., “Workshop on Distance Education”, Attended, Petersburg, VA, April 10, 2008
16. Sheybani, E., “NSF supported workshops on Alice”, Attended, Petersburg, VA, May 7, 2008.

### **Funded Proposals**

| Name of Proposal  | Funding Agency | Amount of Grant | Principal Investigator | Your role, if not Principal Investigator | Period    |
|---|----------------|-----------------|------------------------|--|-----------|
| Curriculum Improvement Partnership Award for the Integration of Research  | NASA           | \$450,000       | S. Garcia-Otero        | Co-PI                                    | 2011-2014 |
| Development of Super-Resolution Synthetic Aperture Radar (SAR) Image Processing Techniques in a Framework of Undergraduate Research, Training, and Outreach | NASA           | \$600,000       | E. Sheybani            | PI                                       | 2012-2015 |
| NASA USLI Grant   | NASA           | \$4,000         | E. Sheybani            | PI                                       | 2011      |
| NASA Faculty Student Research Fellowship Grant  | NASA           | \$130,000       | E. Sheybani            | PI                                       | 2011      |
| Assessing the Efficacy of Cognitive Training on the Mathematics and Science Performance of Minority Students  | NSF            | \$827,302       | Oliver Hill            | Co-PI                                    | 2010-2013 |
| Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)   | NSF            | \$1,186,354     | M. Talaiver            | Co-PI                                    | 2010-2013 |
| DIGISPIRED: Digital Inspiration for Video Game  | NSF            | \$891,016       | M. Talaiver            | Co-PI                                    | 2007-2011 |

|  |                     |  |             |       |           |
|--|---------------------|--|-------------|-------|-----------|
| Design and Programming   |                     |  |             |       |           |
| Broadening Remote Sensing for Geospatial Intelligence at VSU                         | DOD                 | \$136,263<br>(Approved for Funding, but not available) | E. Sheybani | PI    | 2008-2010 |
| Online Technical Training for Virginia Department of Transportation, Service Area II | VDOT                | Open Contract  | A. Ansari   | Co-PI | 2005-2008 |
| Online Technical Training for Virginia Department of Transportation Service Area III | VDOT                | Open Contract  | A. Ansari   | Co-PI | 2005-2008 |
| Digital Signal Processing Equipment for Multidisciplinary DSP laboratory             | Texas Instruments   | \$27,000   | E. Sheybani | PI    | 2008      |
| Sub-Pixel Satellite Image Processing for Flare Detection                             | DoD/ONR<br>NASA/SSC | Fellowship   | E. Sheybani | PI    | 2006      |
| SAR Signal Processing  | NASA                | Fellowship   | E. Sheybani | PI    | 2009      |
| System Health Monitoring   | NASA                | Fellowship   | E. Sheybani | PI    | 2008      |

**OTHER FUNDED PROJECTS:**

1. E. Sheybani, G. Javidi, "Broadening Remote Sensing for Geospatial Intelligence at VSU", Submitted to National Geospatial Intelligence, DoD, March 2008, \$136,263.00 (Accepted, Funding Pending).
2. Sheybani, E., "Digital Signal Processing Equipment for Multidisciplinary DSP laboratory" Equipment Grant Submitted to Texas Instruments, March, 2007 (Accepted for \$27,000 Funding).
3. Sheybani, E., "USDA-CSREES Grantsmanship Workshop" Travel Grant Submitted to USDA-CSREES, September, 2006 (Accepted for \$500 Funding).
4. Sheybani, E., "Arctic New Investigators Workshop" Travel Grant Submitted to USDA-CSREES, August, 2006 (Accepted for \$500 Funding).
5. M. Talaiver, E. Sheybani, G. Javidi "DIGISPIRED: Digital Inspiration for Video Game Design and Programming", Submitted to NSF/ITEST, October 2005 (Accepted for \$895,012 Funding).
6. E. Sheybani, "Genomic Signal Processing for Early Cancer Detection", DoD/UNCF Special Programs, March 2006, (Accepted for \$10,000 Funding W911NF-04-1-0045).
7. A. Ansari, E. Sheybani, G. Javidi, et. al., "Online Technical Training for Virginia Department of Transportation, Service Area II", Submitted to VDOT, August 5, 2005 (Accepted, Open Contract).

8. A. Ansari, E. Sheybani, G. Javidi, et. al., "Online Technical Training for Virginia Department of Transportation Service Area III", Submitted to VDOT, August 5, 2005 (Accepted, Open Contract).
9. E. Sheybani, "Biomedical Imaging for Cancer", Submitted to NIH/EARDA mini-grants, June 2005 (Accepted for \$3,000 Funding).
10. E. Sheybani, G. Javidi, "Establishment of Global Multinode Teleconferencing Environment Infrastructure for Research and Education at VSU", Submitted to VSU/RIG, February 2005 (Accepted for \$10,000 Funding).
11. G. Javidi, E. Sheybani, "Enhancing Research Capacity and Developing Wireless Communications Curriculum for Students in Computer Science and Engineering", Submitted to VSU/RIG, February 2005 (Accepted for \$10,000 Funding).
12. E. Sheybani, G. Javidi, "Virginia State University Pre-college Readiness and Enrichment Program (VSU MSEIP PREP)", Submitted to DEd/MSEIP, March 2005 (Accepted for \$49,291 Funding).
13. Sheybani, E. "Applied Digital Signal Processing in Biomedicine", DRI Grant Proposal submitted to the CoST Dean's Office at the University of Southern Mississippi, October 2003. (Accepted for \$2,000 Funding)
14. Sheybani, E. "Online EET 141: Direct Current Circuits", Grant Proposal submitted to PT3 and Morehead State University, February 2003. (Accepted for \$1,500 Funding)
15. Sheybani, E. "Establishment of Computer Lab and Center for Design, Development, and Deployment of Advanced Technologies", Internal Grant submitted to Morehead State University, February 2003. (Accepted for \$32,000 Funding)
16. Sheybani, E., "Study of Kentucky Biomedical Research Infrastructure Network (KBRIN) Requirements", Grant Proposal submitted to NIH/KBRIN, February 2003. (Accepted for \$13,500 Funding)
17. Sheybani, E., "Application for software funding: MATLAB", Internal Grant submitted to Morehead State University, January 2003. (Accepted for \$3,000 Funding)
18. Sheybani, E., Javidi, G.; "Recruitment of minorities and disadvantaged students into science and engineering technology programs", Grant Proposal submitted to Digiton Corporation, NC, November 2002. (Accepted for \$6,500 Funding)
19. Sheybani, E., Javidi, G., et. al; "Online Master of Science in Industrial Technology", Revolving Funds Proposal submitted to KYVU, November 2002. (Accepted for \$250,000 Funding)
20. Sheybani, E., et. al., "The MSU Space Science Center", Grant Proposal submitted to NASA, 2002. (Accepted for \$500,000 Funding)

### **SPECIAL SKILLS:**

Robotics (BoeBot, Vex, Lego, other platforms)

Video Game Design (Maya, Alice, Squeak, Kahootz, etc.)

Digital Signal (Video/Image/Voice/Data) Processing and Analysis (Wavelets and Fractals)

Modeling and Simulation Tools (IDL, MATLAB, MathCAD)

GIS/GPS (ArcInfo, ArcCatalog, ArcMap, ArcGIS, ArcTools)

Remote Sensing (ENVI, IDL, ERDAS)

Programming Languages, DBMS, OS, and Web Development Tools (C, C++, VC++, VB, Java, Javascript,

Unix, Linux, C#, J#, .NET, XML, Access, SQL, Oracle, FoxPro, PHP, Apache, MySQL)

Research in Design and Development of Algorithms

Networking (ISDN, ATM, NT, Cisco)

TeleMedicine, TeleEducation, TeleConsultation

Bio-Medical Imaging (DICOM)

Writing and Preparing Proposals

Technical Writing

ABET Assessment

**Exceptional Communication Skills**

AC/DC Motors (1 and 3 Phase), PLCs, Controls, Power Systems/Electronics Manufacturing and Robotics (MasterCAM, CNC)

**STUDENT SUPERVISION:**

- \* Member of the supervisory committee for Eight (10) M.S. Thesis and Projects.
- \* Advisor to 48 students in B.S. program.
- \* Research Supervisor to 8 Undergraduate Students
- \* Undergraduate Research Mentor to VSU NSF HBCU-UP Project
- \* Undergraduate Research Advisor to 30+ VSU NASA Interns (CIPAIR and NSTI projects)

**SYNERGETIC ACTIVITIS:**

Summer Faculty Research Fellow, “Sub-Pixel Satellite Image Processing for Flare Detection”, ONR/SSC, Summer 2006.

Summer Faculty Research Fellow, “Power System Health Monitoring”, NASA AMES, Summer 2008. Summer Faculty Research Fellow, “Signal Processing for Synthetic Aperture Radar”, NASA GODDARD, Summer 2009.

**SCIENTIFIC PANELS:**

Invited Panel of Reviewers: NSF/ITEST Program, Washington, DC, June 9-10, 2008. Panel of

Judges: DoD/ASEE SMART Program, Washington, DC, January 2008-present. Panel of

Judges: DoD/ASEE NDSEG Program, Washington, DC, February 2008-present. Panel of

Judges: DoD/ASEE SFFP Program, Washington, DC, February 2007-present.

Panel of Judges: NASA/ASEE ASP Program, Washington, DC, February 2007-present.

Hardware/Software Design Engineer, Siemens Telecom

Lake Mary, FL 1987-1989

**CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

IEEE (GRSS, EMB, SP, COMM, COMP, EDU), ASEE, NRA, TRA

**CERTIFICATIONS OR PROFESSIONAL REGISTRATIONS**

- x Chair, Vice Chair, Secretary, and Member – Several IEEE Sub-Committees on Ethics in Engineering Education
- x Senior Member – IEEE Communications Society
- x Senior Member – IEEE Geosciences and Remote Sensing Society
- x Senior Member – IEEE Engineering in Medicine and Biology Society
- x Senior Member – IEEE Signal Processing Society
- x Senior Member – IEEE Education Society
- x Member – American Society for Engineering Education
- x Licensed Member – National Rocketry Association
- x Licensed Member – Tripoli Rocketry Association

**HONORS AND AWARDS**

| Type of Award                      | Awarded by                       | Date Received |
|------------------------------------|----------------------------------|---------------|
| Senior Membership, Lifetime Member | IEEE International Organization  | 2012-Present  |
| WTS Excellence in Service Award    | IEEE WTS                         | 2010-Present  |
| Licensed Member                    | National Association of Rocketry | 2012-Present  |

|  |                                       |              |
|--|---------------------------------------|--------------|
| Licensed Member  | Tripoli National Rocketry Association | 2012-Present |
| Who's Who in Medicine and Healthcare                     | Who's Who In America                  | 2004-Present |
| Who's Who in Engineering and Technology, Lifetime Member | Strathmore's Who's Who                | 2008-Present |
| Certificate of Award – Favorite Teacher                  | MSEIP Grant                           | 2007-2008    |

### **SERVICE ACTIVITIES**

Reviewer (Proposals, Books, and Articles), NSF, NASA, IEEE, ACM, ASEE, ETD, NAIT, IASTED, NIH, DoD/NSF (NDSEG, SMART), ACTA Press, Thomson Learning

Member, DoD IVTT Steering Committee

Member, IEEE (GRSS, EMB, SP), ACM, ASEE

Member, VSU Computer Engineering Industrial Advisory Committee (student, faculty sub-committees)

Member, VSU Computer Engineering Research, ABET Accreditation, Student Practice Company, and Library Committees

Member, VSU General Education Committee

Member, VSU Engineering Grievance Committee

Chair/Member, VSU Engineering Faculty Hiring Committee

Member, VSU Faculty Development Advisory Board

Member, VSU Faculty Commencement Marshals

Member, VSU Faculty Senate

Member, VSU DE Planning Teams

Member, VSU Faculty Senate Sub-Committee

Member, Collaborative VSU-ISB Training Group for Systems Biology Tools and Applications

Member, International Program Committee, IASTED Technical Education, TeleHealth, Education and Technology

Chairman/Moderator, Biomedical Image Processing, IASTED, ASEE

Mentor/Advisor, Deep South Network for Cancer Control

TPC/Track/Session Chair, IEEE/ACM/WTS 2006-2010

Judge, School Science Fair

Member, F38 UAV Standards Committee

Member, USF HSNR, ICE-T, and DMIP

Participant, Richmond Joint Engineers Council (RJEC)

### **PUBLICATIONS**

#### **Recent Journal Articles**

1. G. Javidi, E. Sheybani, D. Mason, "Visualization of Real-time Radar Data by Integration of X-Band Software", ACM-IJITN, 2014.
2. G. Javidi, E. Sheybani, J. Williams, "Development of a Satellite Communication Emulator for the Hyperspectral Microwave Atmospheric Sounder (HyMAS)", ACM-IJITN, 2014.
3. G. Javidi, E. Sheybani, "Teaching Computer Programming through Game Design: A Game-First Approach", GSTF JoC, Vol 4 No 1, 2014.
4. E. Sheybani, L. Ralph, G. Javidi, A. Eslami, J. Luttamaguzi, "SNMP-Based RMA Analysis of Wired and Wireless Networks" ACM-IJITN, 5.3, pp. 49-53, 2013.
5. G. Javidi, E. Sheybani, "Improving Students' Skills, Knowledge and Abilities in Computer Programming: A STEM Project", CCSC-SE, November 2013.



### **Recent Conference Proceedings**

1. J. Luttamaguzi, D. M. Brooks, A. Eslami, E. Sheybani, G. Javidi, P. M. Gabriel, "Using Simulations and Computational Analyses to Study a Frequency-Modulated Continuous-Wave Radar", presented in 11th international conference on excellence in education, July 7-10, Paris, France.
2. G. Javidi, E. Sheybani, "Validation of a Course for Video Game Design Training", Proceedings of the ACM CGAT 2014, March 24-25, 2014, Singapore.
3. Giti Javidi, Ehsan Sheybani, Danielle Mason, "Real-time Radar Data Visualization", Proceedings of the 2014 International Conference on Modeling, Simulation and Visualization Methods, July 21-24, 2014, Las Vegas, Nevada.
4. Ehsan Sheybani, Giti Javidi, "Smart Wireless Sensor Networks", Proceedings of 4th U-World-2014, June 19-21, 2014, Dalian, China.
5. Jamiiru Luttamaguzi, Ka'Ren Byrd, Akbar Eslami, Giti Javidi, Ehsan Sheybani, "Simulated Spaceborne Numerical Convergence Study", Proceedings of the 2014 International Conference on Modeling, Simulation and Visualization Methods, July 21-24, 2014, Las Vegas, Nevada.
6. Javidi, G.; Sheybani, E.; "Game Design as a Motivation for High School Students to Learn Programming" Proceedings of ACM SIGCSE 2014, March 5-8, Atlanta, GA.
7. E. Sheybani, S. Garcia, G. Javidi, "Digital Image Processing in Surface Engineering Quality Control", Proceedings of the 2014 International Conference on Image Processing, Computer Vision & Pattern Recognition, July 21-24, 2014, Las Vegas, Nevada.
8. Jamiiru Luttamaguzi, Ka'Ren Byrd, Akbar Eslami, Ehsan Sheybani, and Giti Javidi, "Case Study: Numerical Convergence Study on Simulated Spaceborne Microwave Radiometer Measurements of Earth", Proceedings of ASEE 2013, June 23-26, Atlanta, GA.
9. J. Luttamaguzi, D. M. Brooks, A. Eslami, E. Sheybani, G. Javidi, P. M. Gabriel, "The Application of fast Fourier Transforms on Frequency-Modulated, Continuous-Wave Radars", Proceedings of ASEE 2013, June 23-26, Atlanta, GA.
10. Akbar Eslami, James Lee Jr, Henry Mishoe, Manohar Deshpande, Jamiiru Luttamaguzi, Ehsan Sheybani, "Development of Wideband Dual Polarized of Microstrip Antennas for Microwave Remote Sensing", Proceedings of SPACOMM 2013, April 21-26, Venice, Italy.
11. K. Hendricks, E. Sheybani, "Advanced Traffic Warning System", Proceedings of the HBCU-UP Conference, April 2014, Petersburg, VA.
12. J. Culley, E. Sheybani, "Pothole Detection System", Proceedings of the HBCU-UP Conference, April 2014, Petersburg, VA.
13. G. Javidi, E. Sheybani, D. Mason, "Visualization of Real-time Radar Data by Integration of X-Band Software", Proceedings of IEEE WTS, April 2014, Washington, DC.
14. G. Javidi, E. Sheybani, J. Williams, "Development of a Satellite Communication Emulator for the Hyperspectral Microwave Atmospheric Sounder (HyMAS)", Proceedings of IEEE WTS, April 2014, Washington, DC.
15. Talaiver, M.; Javidi, G.; Sheybani, E.; Yang, S.; "Inspiring High School Students through STEM Exploration" Proceedings of SITE 2013, March 21-25, New Orleans, LA.
16. K. Parks, E. Sheybani, "Traffic Sign Recognition", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
17. X. Collier, E. Sheybani, "Linux: Play Station 3", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
18. M. Campbell, E. Sheybani, "Comparing and Contrasting Windows 7 and Windows 8 File Systems", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.

### **Recent Poster Presentations**

1. C. Young, G. Javidi, E. Sheybani, "Space Geodesy Project", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
2. A. Hopkins, G. Javidi, E. Sheybani, "Very Long baseline interferometry (VLBI)", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.

3. C. Brown, G. Javidi, E. Sheybani, "Satellite Detection through USRP", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
4. B. Harrington, G. Javidi, E. Sheybani, S. Garcia-Otero, "Signal Processing With USRP", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.
5. M. Campbell, G. Javidi, E. Sheybani, "Universal Software Radio Peripheral Radar GPS Receiver", (Report and Poster), Proceedings of the NASA GSFC Research Conference, July 2014, Greenbelt, MD.

### **Recent Undergraduate Research Conference Proceedings (NASA GSFC STEM Research)**

1. P. Fon, E. Sheybani, S. Garcia-Otero, "Ecosar: Synthetic Aperture Radar Development", Proceedings of ERN Conference 2014, Washington, DC.
2. J. Holmes, E. Sheybani, S. Garcia-Otero, "Miniature Fourier Transform Spectrometer", Proceedings of ERN Conference 2014, Washington, DC.
3. B. Megna, E. Sheybani, S. Garcia-Otero, "Autonomous Robot", Proceedings of ERN Conference 2014, Washington, DC.
4. C. Young, G. Javidi, E. Sheybani, "Software Defined Radio Implementation of a Fourier Transform: S-DRIFT", Proceedings of ERN Conference 2014, Washington, DC.
5. A. McCaw, E. Sheybani, "Speech to Text Converter", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
6. J. Williams, G. Javidi, E. Sheybani, "Hyperspectral Microwave Atmospheric Sounder Emulator", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.
7. L. Ralph, G. Javidi, E. Sheybani, "Characterizing Performance of SNMP Monitor and Control Interfaces", Proceedings of the HBCU-UP Conference, April 2013, Petersburg, VA.

### **OTHER PUBLICATIONS**

#### **Undergraduate Research:**

1. G. Javidi, E. Sheybani, "Improving Students' Skills, Knowledge and Abilities in Computer Programming: A STEM Project", Twenty-Seventh Annual Consortium for Computing Sciences in Colleges, Southeastern Conference, Furman University, Greenville, SC, November 15-16, 2013.
2. Campbell, M.; Johnson, B.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Universal Software Radio Peripheral Radar Transmission", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
3. Hopkins, A.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Integrating Software Defined Radio with USRP", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
4. Young, C.; Deshpande, M.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Software Defined Radio Implementation of a Fourier Transform S-DRIFT", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
5. White, K.; Kongpop, U.; Sheybani, E.; Javidi, G.; Eslami, A.; Luttaguzi, J.; Djavadi, D.; "Temperature Sensor and Feedback Control for a Cryogenic detector refrigeration system", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
6. Megna, B.; Hosler, J.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Autonomous Robot", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
7. Holmes, J.; Aslam, S.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Miniature Fourier Transform Spectrometer", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
8. Dirksen, E.; Aslam, S.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Fourier Transform Spectrometer", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
9. Fon, P.; Perrine, M.; Zimmerman, R.; Spartana, N.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "ECOSAR: Synthetic Aperture Radar Development", (Poster and Report) Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2013.
10. Culley, J.; Hilliard, L.; Back, J.; Sheybani, E.; Garcia-Otero, S.; Djavadi, D.; "Hyperspectral Microwave

3. C. Brown, G. Javidi, E. Sheybani, "Satellite Detection through USRP", (Report and Poster), Proceedings of July 2013.
11. Bobby Mote, M. Cowell, E. Thompson, and E. Sheybani, "Design and Implementation of Air Quality Sensor on the Arduino Uno Development Platform", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
12. Javon Blunt, K. Clark, E. Sheybani, "Temperature Controlled Fan", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
13. Shawn Mull, M. Thornton, E. Sheybani, "FPGA based home security system", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
14. Myishia Cowell, E. Sheybani, "Advancements in Holography", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
15. Rasaan Allen, and E. Sheybani, "Android 4.0 Ice Cream Sandwich", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
16. Kendra Parks, and E. Sheybani, "IPAD 3", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
17. Marcus Washington, and E. Sheybani, "iPhone 4s: Is It the Best Phone Created? ", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
18. Meesha Rashidi, and E. Sheybani, "iPhone 5 Hologram", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
19. Valdis Wallace, and E. Sheybani, "Perendev Motor", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
20. Carla Gorosito, and E. Sheybani, "PrintBrush: Pocket-Sized Printer", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
21. Bryan Johnson, and E. Sheybani, "PS3", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
22. Ray McAlmont, and E. Sheybani, "The Future of Smart Tablets: Apple vs. Competitors", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
23. Michael Sanders, and E. Sheybani, "The iPhone 5", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
24. Monique T. Williams, and E. Sheybani, "The Play Station Vita", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
25. Tavon Robinson, and E. Sheybani, "The RollTop Computer", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
26. Derrick Robinson, and E. Sheybani, "Using Living Cells as Computer Nodes", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
27. LaTasha Ralph, and E. Sheybani, "Wifi Cufflinks", 6th Annual Undergraduate Research Conference, Petersburg, VA, April 6, 2012.
28. Nick Rashidi, M. Rashidi, and E. Sheybani, "Advancement of NASA Project AQUA with New JAXA G-Com Satellite Technology", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
29. Kasan Turner, and E. Sheybani, "Apollo Missions", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
30. Kamarr Holligan, O. Paul, and E. Sheybani, "Aura: The Atmosphere Shield", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
31. John Culley, C. Colendrino, and E. Sheybani, "Cleaning Up Space", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
32. Bobby Mote, E. Glover, D. Legette, and E. Sheybani, "Enabling Faster Space Travel through Plasma-based Propulsion", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
33. Natasha Sheybani, and E. Sheybani, "Moon vs. Mars Colonization", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
34. Latasha Ralph, J. Holmes, T. Banks, and E. Sheybani, "NASA AQUA Mission", 5th Annual Undergraduate

- Research Conference, Petersburg, VA, April 1, 2011.
35. Kendra Parks, D. Robinson, T. Robinson, and E. Sheybani, "NASA Mars Rover: Curiosity", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  36. Timothy Fowler, and E. Sheybani, "NASA Space Robots", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  37. Shawn Mull, M. Thornton, B. Johnson, and E. Sheybani, "Robonaut 2", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  38. Mohammad Khan, and E. Sheybani, "Sample Analysis at Mars", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  39. Christine Saywack, and E. Sheybani, "Satellite Research and the Search for Alternative Energy", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  40. Evvarey Thompson, and E. Sheybani, "Space Robots", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  41. Daniel Holmes, K. Williams, and E. Sheybani, "Space Travel through Plasma-based Propulsion", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  42. Randal Ward, and E. Sheybani, "Sample Analysis The Hubble Space Telescope", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  43. Nevil Kabrawala, and E. Sheybani, "NASA's Success in the International Space Station", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  44. Macy Smith, and E. Sheybani, "Android: The New Breed", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  45. Rasaan Allen, Myishia Cowell, and E. Sheybani, "Honeycomb OS of the Future", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  46. Bobby Mote, and E. Sheybani, "Improving Flexibility and Application Adaptability in Embedded Systems through Dynamic Configuration of Embedded Operating Systems", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  47. Evvarey Thompson, V. Garcia, and E. Sheybani, "Malicious Malware!", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  48. Darrell Payne, O. Paul, and E. Sheybani, "Linux Operating System", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  49. Vandy Jones, K. Holligan, and E. Sheybani, "Virtualization: The Next Big Thing", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  50. Frank Pinto and A. Hall, and E. Sheybani, "The Google Chrome OS Cr-48", 5th Annual Undergraduate Research Conference, Petersburg, VA, April 1, 2011.
  51. EvVarey Thompson, and E. Sheybani, "The Design and Development of a Portable Potentiostat", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  52. Kyalik Clark, and E. Sheybani, "The New Age of Technology", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  53. Derrick Brown, and E. Sheybani, "Android Operating System", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  54. Adrian Lamb, and E. Sheybani, "Editable HTML Operating System User Interface", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  55. Mathew Singleton, Omar Dancey, and E. Sheybani, "No Guts, No Glory", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  56. Cedrick Kwindja, and E. Sheybani, "Operating System of an iPod", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  57. Myishia Cowell, and E. Sheybani, "The Creation of a Standard Operating Procedure for the QC5000 Printed Circuit Boards", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  58. Daniel Holmes, and E. Sheybani, "The Samsung Omnia i910 Windows Mobile", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  59. Dwayne Waddey Jr., E. Blakeney, and E. Sheybani, "A New Way to Shop", 4th Annual Undergraduate

- Research Conference, Petersburg, VA, April 9, 2010.
60. Joseph Johnson, C. Willis and M. Westbrook, and E. Sheybani, "Fingerprint Recognition", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  61. Oneil Paul and V. Jones, and E. Sheybani, "LabVIEW 8 & Speedy 33 (Digital Signal Processing)", 4th Annual Undergraduate Research Conference, Petersburg, VA, April 9, 2010.
  62. Eric Blakeney, and E. Sheybani, "Radio Frequency Identification (RFID)", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  63. Terrell Jones, and E. Sheybani, "Radio Frequency Identification: A New Look on Life", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  64. Tiarra Elmore, and E. Sheybani, "The Hidden Node", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  65. Brandon Miller, and E. Sheybani, "The History of DVDs", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  66. Mike Westbrook, and E. Sheybani, "TiVo Series3", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  67. Conrad Willis, and E. Sheybani, "Wars and Progress in Technology", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  68. Sean Turner, and E. Sheybani, "3D Processor Chips", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  69. Mohammad Z. Khan, and E. Sheybani, "Digital TV Transition", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  70. Andrea Thomas, and E. Sheybani, "Hot Music", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  71. Asheli Cherry, and E. Sheybani, "Lights On", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  72. Adrian Lamb, and E. Sheybani, "Making the Operating System Yours", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  73. Algernon Evans, A. Pierre, B. Brown, and E. Sheybani, "Motion-Sensor Side-View Mirror", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  74. Clarence Williams, Jr., C. Gaie, B. Miller, and E. Sheybani, "Robot Medical Assistant", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  75. Rashe Dean, K. King, and E. Sheybani, "Sonar Fishing Lure with LED light", 3rd Annual Undergraduate Research Conference, Petersburg, VA, April 17, 2010.
  76. Tona Booker, Amari Long, Christopher Oliver, Dr. Ehsan Sheybani, "Exploring the past, present and future of the hard drive", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  77. Clarence Williams, Algernon Evans, Charles Gaie, Dr. Ehsan Sheybani, "Past, Present, and Future of the USB Drives", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  78. Anthony Gitalado, Nadine Jerome, Dr. Ehsan Sheybani, "The Future of CD/DVD Players", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  79. Amos Pierre, Benjamin Brown, Jamal Norcome, Dr. Ehsan Sheybani, "Past, Present, and Future of Random Access Memories (RAM)", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  80. India Young, Brandon Miller, Dr. Ehsan Sheybani, "Microprocessors: past, present and future", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  81. C. Green, L. Crawley, K. Mason, T. Booker, E. Sheybani, G. Slaughter, "Sense-O-Matic Cane", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  82. Gitalado, Y. Campbell, C. Oliver, L. Smith, E. Sheybani, G. Slaughter, "Battery Health Indicator System", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  83. Green, L. Crawley, K. Mason, T. Booker, E. Sheybani, G. Slaughter, "Sense-O-Matic Cane", VSU, HBCU

- UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
84. Gitalado, Y. Campbell, C. Oliver, L. Smith, E. Sheybani, G. Slaughter, "Battery Health Indicator System", VSU, HBCU UP / NSF Program, Second Annual Undergraduate Research Conference, April 18, 2008.
  85. Yohance Campbell, Ehsan Sheybani, and Shobha Sriharan, "Application of Remote Sensing Technology in Assessment of Coastal and Urban Flooding from Katrina", VSU, HBCU UP / NSF Program, Annual Undergraduate Research Conference, April 6, 2007.
  86. F. Rodman, E. Sheybani, Y. Campbell, "Remote Sensing of Flood Damage Assessment", Proceedings of HBCU-UP National Research Conference, Washington, DC, October 4-7, 2007.
  87. L. Cox, G. Javidi, L. Bryan, E. Sheybani, "Computer Visualization Algorithms for Proteomics Studies in Cancer", Proceedings of HBCU-UP National Research Conference, Washington, DC, October 4-7, 2007.
  88. Sheybani, E., Javidi, G., Hardy, M., Denton, L., Campbell, Y.; "Enhancing Research Capacity and Developing Wireless Communications Curriculum for Students in Computer Science and Engineering", Proceedings of IEEE/SECon 2007, Richmond, VA, March 22-25 2007.
  89. Sheybani, E., Javidi, G., Wanta, S., Rankin, W.; "Establishment of Global Multinode Teleconferencing Environment Infrastructure for Research and Education", Proceedings of IEEE/SECon 2007, Richmond, VA, March 22-25 2007.
  90. Sheybani, E., Wimbush, C., Sriharan, S., "Genomic Signal Processing for Cancer Detection", Proceedings of ICC 2006, Washington, DC, April 2006.
  91. Sheybani, E., Wimbush, C., Sriharan, S., "Genomic Signal Processing", Proceedings of ABRCMS 2005, Atlanta, GA, October 2005.

#### **Journals and Conferences:**

1. E. Sheybani, "Wireless autonomous devices: Dimensionality Reduction and Noise Removal in Wireless Autonomous Devices", Academy Publishers, June 2012 (in press).
2. E. Sheybani, "Wireless Sensor Networks - Technology and Applications: An Algorithm for Denoising and Compression in Wireless Sensor Networks", InTech Publishers, July 2012, (in press).
3. E. Sheybani, "Advanced Applied Mathematics for Real-Time Noise Cancellation", Springer Proceedings in Mathematics and Statistics, Spring 2012, (in press).
4. M. Lei, D. Song, Y. Yao, R. Sankar, E. Sheybani, and W. Qian, "Medical Image Enhancement Using Fourier Descriptors and Hybrid Filters", Handbook of Medical Image Processing (2nd Edition), Isaac Bankman (Editor), Academic Press, pp. 57-67, 2008.
5. Aparna Varde, Stephen Bique, Elke Rundensteiner, David Brown, Jianyu Liang, Richard Sisson, Ehsan Sheybani, and Brian Sayre, "Component Selection to Optimize Distance Function Learning in Complex Scientific Data Sets", Published in Database and Expert Systems Applications of Lecture Notes in Computer Science, Volume 5181/2008, pp: 269-282, Springer Berlin / Heidelberg Publications, 2008. 0302-9743 (Print).
6. Sheybani, E.; Garcia-Otero, S.; Adnani, F.; Javidi, G.; "A fast algorithm for surface quality comparison and assessment in advanced and automated manufacturing", Proceedings of International Forum on Systems and Mechatronics (IFSM) 2012, August 6-9, 2012, Virginia Beach, VA.
7. Brandon Johnson, Manohar Deshpande, Ehsan Sheybani, Giti Javidi, Djavad Djavadi, Akbar Eslami, and Jamiiru Luttamaguzi. "Low-Frequency Inverse Synthetic Aperture Radar (ISAR) Data Collection", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
8. Mario H.W Campbell, Manohar Deshpande, Ehsan Sheybani, Giti Javidi, Akbar Eslami, Jamiiru Luttamaguzi, and Djavad Djavadi. "Low Frequency Radar Data Collection", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
9. LaTasha Ralph, Ehsan Sheybani, Giti javidi, Djavad Djavadi, Akbar Eslami, and Jamiiru Luttamaguzi. "Reliability, Maintainability, and Availability Analysis for the McMurdo TDRSS Relay System", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
10. Janelle C. Williams, Lawrence Hilliard, Giti Javidi, Ehsan Sheybani, Djavad Djavadi, Akbar Eslami, Jamiiru Luttamaguzi "Hyperspectral. Microwave Atmospheric Sounder (HyMAS) Emulator", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.

11. Danielle Mason, Si-Chee Tsay, Peter Pantina, Richard Hansell, Philip M. Gabriel, Ehsan Sheybani, Giti Javidi, Djavad Djavadi, Akbar Eslami, and Jamiiru Luttamaguzi. "Integration of X-Band Radar Software to Visualize Real-time Radar Data", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
12. L. Arroyo, Q. Bond, E. Sheybani, S. Garcia-Otero, "Graphical User Interface Development for RF Engineers", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
13. T. Banks, J. Wilmot, E. Sheybani, S. Garcia-Otero, "TFTP in Flight Systems", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
14. X. Collier, A. Caroglanian, E. Sheybani, S. Garcia-Otero, "Ka-Band Site Characterization Project Rain Rate Data Analysis", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
15. S. Mull, M. Thornton, D. Bradley, E. Sheybani, S. Garcia-Otero, "Soil Moisture Active Passive Radiometer Digital Electronics System Analysis Tool", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
16. E. Glover, Q. Bond, E. Sheybani, S. Garcia-Otero, "Graphical User Interface using RF/Microwave Development in Matlab", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
17. James Lee Jr, Henry Mishoe, Manohar Deshpande, Akbar Eslami, Jamiiru Luttamaguzi, Ehsan Sheybani, and Giti Javidi. "Design, Fabrication, and Testing of Microstrip Transmission Lines and Antennas", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
18. Dwayne M. Brooks, Si-Chee Tsay, Philip M. Gabriel, Peter Pantina, Akbar Eslami, Jamiiru Luttamaguzi, Ehsan Sheybani, and Giti Javidi. "The Application of Fast Fourier Transforms on Frequency-Modulated, Continuous-Wave Radars", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
19. Ka'Ren Byrd, Jeffrey Piepmeier, Akbar Eslami, Jamiiru Luttamaguzi, Ehsan Sheybani, and Giti Javidi. "Numerical Convergence Study on Simulated Spaceborne Microwave Radiometer Measurements of Earth", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
20. Michael Sutton, Larry Hilliard, Nicholas Shur, Paul Racette, Akbar Eslami, Jamiiru Luttamaguzi, Ehsan Sheybani, and Giti Javidi. "Computer Aided Design of Hyperspectral Microwave Atmospheric Sounder Scanhead", Proceedings of NASA GSFC Annual Research Poster Exhibit, July 2012.
21. Sheybani, E.; Garcia-Otero, S.; Adnani, F.; Javidi, G.; "Artificial intelligence for pattern recognition in automated surface engineering", International Conference on Systems and Informatics (ICSAI), 2012 , pp 2695 – 2701, Yantai, China.
22. Sheybani, E.; Javidi, G.; "Multi-resolution filter banks for enhanced SAR imaging", International Conference on Systems and Informatics (ICSAI), 2012 , pp 2702 - 2706, Yantai, China.
23. G. Javidi, E. Sheybani, "Non-Academic Interventions in STEM Training", Proceedings of ASEE National Conference, San Antonio, TX, June 8-12, 2012.
24. S. Garcia-Otero, E. Sheybani, "Retaining Minority Students in Engineering: Undergraduate Research in Partnership with NASA", Proceedings of ASEE National Conference, San Antonio, TX, June 8-12, 2012.
25. E. Sheybani, S. Garcia-Otero, F. Adnani, G. Javidi, "A Fast Algorithm for Surface Quality Comparison and Assessment in Advanced and Automated Manufacturing", IJERI, Volume 4, Number 1, Spring/Summer 2012.
26. E. Sheybani, "Adaptive Wavelet Filtering for Data Enhancement in Wireless Sensor Networks", Journal of Sensor Technologies, Vol. 2, No. 2, 2012, pp 82-86.
27. M. Thornton, S. Mull, E. Sheybani, and S. Garcia-Otero, "Applications of Signal Processing in NASA Related Research", Emerging Researchers National (ERN) Conference in STEM, Atlanta, GA, February 23-25, 2012
28. Sheybani, Ehsan; Garcia-Otero, Singli; Adnani, Fedra; Javidi, Giti; Deshpande, Manohar, "An Algorithm for Real-Time Blind Image Quality Comparison and Assessment", IJECE, Vol 2, No 1: February 2012.
29. E. Sheybani, "Adaptive Wavelet Filtering for Data Enhancement in Wireless Sensor Networks", JST, Vol.2 , No. 2, June 2012, pp. 82-86.
30. Ehsan Sheybani, Singli Garcia-Otero, Fedra Adnani, Giti Javidi , "A Fast Algorithm for Automated Quality Control in Surface Engineering", Journal of Surface Engineered Materials and Advanced Technology, 2012, 2, 120-126
31. Faison, M., Serpell, Z., Ahluwalia, V., Kraft, K., Sheybani, E., Javidi, G., and Hill, O., "Testing the Efficacy

11. Danielle Mason, Si-Chee Tsay, Peter Pantina, Richard Hansell, Philip M. Gabriel, Ehsan Sheybani, Giti presented at the Annual Meeting of NSF REESE Summit, October 2011.
32. S. Garcia-Otero, E. Sheybani, "Reach for the Stars: Undergraduate Research Partnered with NASA", Proceedings of ASEE Mid Atlantic Conference, Philadelphia PA, Oct 29, 2011.
33. Faison, M., Serpell, Z., Ahluwalia, V., Kraft, K., Sheybani, E., Javidi, G., and Hill, O., "Correlations between cortical recruitment during an n-back task and cognitive performance", Poster presented at the Annual Meeting for the Association of Psychological Science, Washington, DC, 2011.
34. L. Ralph, S. Garcia-Otero, E. Sheybani, "Hardware and software development for cryogenic detector measurement", Proceeding ASEE Mid Atlantic Conference, Philadelphia PA, Oct 29, 2011.
35. F. Pinto, E. Sheybani, S. Garcia-Otero, "Goddard Electro-Magnetic Antenna Anechoic Chamber", Proceedings of ASEE Mid Atlantic Conference, Philadelphia PA, Oct 29, 2011.
36. S. Garcia-Otero, E. Sheybani, "Engineering Senior Design Course: New and Improved", Proceedings of ASEE National Annual Conference, VanCouver, BC, June 26-29, 2011.
37. M. Thornton, S. Mull, E. Sheybani, S. Garcia-Otero, "FPGA-Based Home Security System", Emerging Researchers National (ERN) Conference in STEM, Atlanta, GA, February 2011.
38. Sheybani, E., "Dimensionality Reduction and Noise Removal in Wireless Sensor Networks", New Technologies, Mobility and Security (NTMS), 2011 4th IFIP International Conference on, 2011, pp 1–5.
39. Ehsan O. Sheybani, Manohar Deshpande and Nargess Memarsadeghi, "Wavelet Filter Banks for Super-Resolution SAR Imaging", Proceedings of AIAA Infotech@Aerospace conference 2011, March 29–31, St. Louis, Mo.
40. Ehsan O. Sheybani, "Enhancement of EPS Diagnostics/Prognostics Using Wavelet Filter Banks", Proceedings of AIAA Infotech@Aerospace conference 2011, March 29–31, St. Louis, Mo.
41. Badombena-Wanta, S.; Sheybani, E.O., "Mobile communications for development: Enabling strategic and low-cost e-applications for rural and remote areas", Wireless Telecommunications Symposium (WTS), 2010, pp. 1 – 7.
42. Sheybani, E.O.; Mengshoel, O.J.; Poll, S., "Removing spikes while preserving data and noise using wavelet filter banks", Aerospace Conference, 2010 IEEE, pp. 1 – 10.
43. Sheybani, E.O.; Javidi, G., "An algorithm for real-time noise cancellation in wireless sensor networks", Wireless Telecommunications Symposium (WTS), 2010, pp. 1 – 4
44. Y. Ouyang, Ehsan Sheybani, Giti Javidi, et. al., "Games, Sims, and Virtual Worlds in K-20 STEM Education", 21<sup>st</sup> International SITE Conference, March 2010, San Diego, CA.
45. Sheybani, E., Garcia-Otero, S. and K. Williamson, "Implementing ABET Engineering Criteria 2000 for New Programs at a Small HBCU," Proceedings of 2009 ASEE Annual Conference.
46. Javidi, G., Sheybani, E., Talaiver, M., Yang, Seung "Video Game Design: A New Paradigm for Successful Learning", 2009 World Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'09), Los Vegas, Nevada, July 13-17, 2009.
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### PROFESSIONAL DEVELOPMENT

| Title                            | Place                     | Date         |
|----------------------------------|---------------------------|--------------|
| DoD Review Panels (SMART, NDSEG) | Arlington, VA             | 2007-Present |
| Member, VSU STEM School          | Virginia State University | 2012-Present |

|   |   |              |
|---|---|--------------|
| Lab   |   |              |
| Faculty Advisor, VSU Rocket Club  | Virginia State University                                   | 2011-Present |
| Faculty Advisor, VSU Robotics Club  | Virginia State University                                   | 2010-Present |
| Faculty Advisor, VSU IEEE Organization – Student Branch                                 | Virginia State University                                   | 2010-Present |
| Seminars on Wireless Communications   | Virginia State University                                   | 2008-Present |
| Seminars on Digital Signal Processing   | Virginia State University                                   | 2008-Present |
| Senior Membership, Lifetime Member  | IEEE International Organization                             | 2012-Present |
| Licensed/Insured Member   | National Association of Rocketry                            | 2012-Present |
| Licensed/Insured Member   | Tripoli National Rocketry Association                       | 2012-Present |
| Presentation to collaborative Training group for systems biology tools and applications | Virginia state university and Institute for Systems Biology | 2008-2010    |

### **Workshops**

1. IEEE EMB PervasiveHealth 2012 Workshop, Computing Technologies for HealthCare, San Diego, CA, May 21-24, 2012.
2. Image Processing with MATLAB Training Course, Mathworks Online Workshop, March 1-2, 2012.
3. DSP Lab workshop, ASEE, San Antonio, TX, June 10, 2012.
4. IEEE/AAAS STEM leadership and innovation, Washington, DC, 2012.
5. FPGA Design Flow Workshop at Florence-Darlington Technical College in Florence, SC, March 15-16, 2012.
6. SLOAN-C Online Workshop Series: Podcasting in Higher Education: Current Trends and Applications, March 4-13, 2009
7. SLOAN-C Certification Series: Online Teaching Certification Program, April 22-June 26, 2009.
8. NECC 2009 Conference, Washington DC, June 28-30, 2009. Taking Digispired (NSF funded grant) students to this conference to present their video games and participate in a competition.
9. Giti Javidi, Ehsan Sheybani, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Fourth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2008, Arlington, VA. (Mandatory presentation by grant fund recipients).
10. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Fifth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2009, Arlington, VA. (Mandatory presentation by grant fund recipients).
11. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired: Digital Inspiration for Interactive Game Design and Programming Skills”, Cohort 4, National Science Foundation ITEST Program, Sixth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2010, Arlington, VA. (Mandatory presentation by grant fund recipients).

12. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Cohort 4, National Science Foundation ITEST Program, Seventh Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2011, Arlington, VA. (Mandatory presentation by grant fund recipients).
13. Ehsan Sheybani, Giti Javidi, Mano Talaiver, and Sueng Yang, “Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)”, Cohort 4, National Science Foundation ITEST Program, Eighth Annual Summit, Poster Presentation and oral presentation on NSF/ITEST grant progress, February 2012, Arlington, VA. (Mandatory presentation by grant fund recipients).
14. Sheybani, E., “ORAU/NEES supported workshop on earthquake research”, Attended, Atlanta, GA, July 2008.
15. Sheybani, E., “Workshop on Distance Education”, Attended, Petersburg, VA, April 10, 2008
16. Sheybani, E., “NSF supported workshops on Alice”, Attended, Petersburg, VA, May 7, 2008.

### **Funded Proposals**

| Name of Proposal  | Funding Agency | Amount of Grant | Principal Investigator | Your role, if not Principal Investigator | Period    |
|---|----------------|-----------------|------------------------|--|-----------|
| Curriculum Improvement Partnership Award for the Integration of Research  | NASA           | \$450,000       | S. Garcia-Otero        | Co-PI                                    | 2011-2014 |
| Development of Super-Resolution Synthetic Aperture Radar (SAR) Image Processing Techniques in a Framework of Undergraduate Research, Training, and Outreach | NASA           | \$600,000       | E. Sheybani            | PI                                       | 2012-2015 |
| NASA USLI Grant   | NASA           | \$4,000         | E. Sheybani            | PI                                       | 2011      |
| NASA Faculty Student Research Fellowship Grant  | NASA           | \$130,000       | E. Sheybani            | PI                                       | 2011      |
| Assessing the Efficacy of Cognitive Training on the Mathematics and Science Performance of Minority Students  | NSF            | \$827,302       | Oliver Hill            | Co-PI                                    | 2010-2013 |
| Digispired ii: Workforce Investigation Inspiration for STEM (wiiSTEM)   | NSF            | \$1,186,354     | M. Talaiver            | Co-PI                                    | 2010-2013 |
| DIGISPIRED: Digital Inspiration for Video Game  | NSF            | \$891,016       | M. Talaiver            | Co-PI                                    | 2007-2011 |



|  |                     |  |             |       |           |
|--|---------------------|--|-------------|-------|-----------|
| Design and Programming   |                     |  |             |       |           |
| Broadening Remote Sensing for Geospatial Intelligence at VSU                         | DOD                 | \$136,263<br>(Approved for Funding, but not available) | E. Sheybani | PI    | 2008-2010 |
| Online Technical Training for Virginia Department of Transportation, Service Area II | VDOT                | Open Contract  | A. Ansari   | Co-PI | 2005-2008 |
| Online Technical Training for Virginia Department of Transportation Service Area III | VDOT                | Open Contract  | A. Ansari   | Co-PI | 2005-2008 |
| Digital Signal Processing Equipment for Multidisciplinary DSP laboratory             | Texas Instruments   | \$27,000   | E. Sheybani | PI    | 2008      |
| Sub-Pixel Satellite Image Processing for Flare Detection                             | DoD/ONR<br>NASA/SSC | Fellowship   | E. Sheybani | PI    | 2006      |
| SAR Signal Processing  | NASA                | Fellowship   | E. Sheybani | PI    | 2009      |
| System Health Monitoring   | NASA                | Fellowship   | E. Sheybani | PI    | 2008      |

**OTHER FUNDED PROJECTS:**

1. E. Sheybani, G. Javidi, "Broadening Remote Sensing for Geospatial Intelligence at VSU", Submitted to National Geospatial Intelligence, DoD, March 2008, \$136,263.00 (Accepted, Funding Pending).
2. Sheybani, E., "Digital Signal Processing Equipment for Multidisciplinary DSP laboratory" Equipment Grant Submitted to Texas Instruments, March, 2007 (Accepted for \$27,000 Funding).
3. Sheybani, E., "USDA-CSREES Grantsmanship Workshop" Travel Grant Submitted to USDA-CSREES, September, 2006 (Accepted for \$500 Funding).
4. Sheybani, E., "Arctic New Investigators Workshop" Travel Grant Submitted to USDA-CSREES, August, 2006 (Accepted for \$500 Funding).
5. M. Talaiver, E. Sheybani, G. Javidi "DIGISPIRED: Digital Inspiration for Video Game Design and Programming", Submitted to NSF/ITEST, October 2005 (Accepted for \$895,012 Funding).
6. E. Sheybani, "Genomic Signal Processing for Early Cancer Detection", DoD/UNCF Special Programs, March 2006, (Accepted for \$10,000 Funding W911NF-04-1-0045).
7. A. Ansari, E. Sheybani, G. Javidi, et. al., "Online Technical Training for Virginia Department of Transportation, Service Area II", Submitted to VDOT, August 5, 2005 (Accepted, Open Contract).

8. A. Ansari, E. Sheybani, G. Javidi, et. al., "Online Technical Training for Virginia Department of Transportation Service Area III", Submitted to VDOT, August 5, 2005 (Accepted, Open Contract).
9. E. Sheybani, "Biomedical Imaging for Cancer", Submitted to NIH/EARDA mini-grants, June 2005 (Accepted for \$3,000 Funding).
10. E. Sheybani, G. Javidi, "Establishment of Global Multinode Teleconferencing Environment Infrastructure for Research and Education at VSU", Submitted to VSU/RIG, February 2005 (Accepted for \$10,000 Funding).
11. G. Javidi, E. Sheybani, "Enhancing Research Capacity and Developing Wireless Communications Curriculum for Students in Computer Science and Engineering", Submitted to VSU/RIG, February 2005 (Accepted for \$10,000 Funding).
12. E. Sheybani, G. Javidi, "Virginia State University Pre-college Readiness and Enrichment Program (VSU MSEIP PREP)", Submitted to DEd/MSEIP, March 2005 (Accepted for \$49,291 Funding).
13. Sheybani, E. "Applied Digital Signal Processing in Biomedicine", DRI Grant Proposal submitted to the CoST Dean's Office at the University of Southern Mississippi, October 2003. (Accepted for \$2,000 Funding)
14. Sheybani, E. "Online EET 141: Direct Current Circuits", Grant Proposal submitted to PT3 and Morehead State University, February 2003. (Accepted for \$1,500 Funding)
15. Sheybani, E. "Establishment of Computer Lab and Center for Design, Development, and Deployment of Advanced Technologies", Internal Grant submitted to Morehead State University, February 2003. (Accepted for \$32,000 Funding)
16. Sheybani, E., "Study of Kentucky Biomedical Research Infrastructure Network (KBRIN) Requirements", Grant Proposal submitted to NIH/KBRIN, February 2003. (Accepted for \$13,500 Funding)
17. Sheybani, E., "Application for software funding: MATLAB", Internal Grant submitted to Morehead State University, January 2003. (Accepted for \$3,000 Funding)
18. Sheybani, E., Javidi, G.; "Recruitment of minorities and disadvantaged students into science and engineering technology programs", Grant Proposal submitted to Digiton Corporation, NC, November 2002. (Accepted for \$6,500 Funding)
19. Sheybani, E., Javidi, G., et. al; "Online Master of Science in Industrial Technology", Revolving Funds Proposal submitted to KYVU, November 2002. (Accepted for \$250,000 Funding)
20. Sheybani, E., et. al., "The MSU Space Science Center", Grant Proposal submitted to NASA, 2002. (Accepted for \$500,000 Funding)

### **SPECIAL SKILLS:**

Robotics (BoeBot, Vex, Lego, other platforms)

Video Game Design (Maya, Alice, Squeak, Kahootz, etc.)

Digital Signal (Video/Image/Voice/Data) Processing and Analysis (Wavelets and Fractals)

Modeling and Simulation Tools (IDL, MATLAB, MathCAD)

GIS/GPS (ArcInfo, ArcCatalog, ArcMap, ArcGIS, ArcTools)

Remote Sensing (ENVI, IDL, ERDAS)

Programming Languages, DBMS, OS, and Web Development Tools (C, C++, VC++, VB, Java, Javascript, Unix, Linux, C#, J#, .NET, XML, Access, SQL, Oracle, FoxPro, PHP, Apache, MySQL)

Research in Design and Development of Algorithms

Networking (ISDN, ATM, NT, Cisco)

TeleMedicine, TeleEducation, TeleConsultation

Bio-Medical Imaging (DICOM)

Writing and Preparing Proposals

Technical Writing

ABET Assessment

Exceptional Communication Skills

AC/DC Motors (1 and 3 Phase), PLCs, Controls, Power Systems/Electronics

Manufacturing and Robotics (MasterCAM, CNC)

**STUDENT SUPERVISION:**

- \* Member of the supervisory committee for Eight (10) M.S. Thesis and Projects.
- \* Advisor to 48 students in B.S. program.
- \* Research Supervisor to 8 Undergraduate Students
- \* Undergraduate Research Mentor to VSU NSF HBCU-UP Project
- \* Undergraduate Research Advisor to 30+ VSU NASA Interns (CIPAIR and NSTI projects)

**SYNERGETIC ACTIVITIS:**

Summer Faculty Research Fellow, “Sub-Pixel Satellite Image Processing for Flare Detection”, ONR/SSC, Summer 2006.

Summer Faculty Research Fellow, “Power System Health Monitoring”, NASA AMES, Summer 2008.

Summer Faculty Research Fellow, “Signal Processing for Synthetic Aperture Radar”, NASA GODDARD, Summer 2009.

**SCIENTIFIC PANELS:**

Invited Panel of Reviewers: NSF/ITEST Program, Washington, DC, June 9-10, 2008.

Panel of Judges: DoD/ASEE SMART Program, Washington, DC, January 2008-present.

Panel of Judges: DoD/ASEE NDSEG Program, Washington, DC, February 2008-present.

Panel of Judges: DoD/ASEE SFFP Program, Washington, DC, February 2007-present.

Panel of Judges: NASA/ASEE ASP Program, Washington, DC, February 2007-present.