Stefan A. Robila, Ph.D.
Professor of Computer Science

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EDUCATION

Ph.D.	Syracuse University	Computer Information Science	2002
M.S.	Syracuse University	Computer Science	2000
B.S.	University of Iasi	Computer Science	1997

PROFESSIONAL EXPERIENCE

Professor, Montclair State University (MSU), Department of Computer Science 09/2003 – present
(Assistant Professor 2003-2008, Associate Professor 2008-2012, Full 2012-present)

- Active researcher with $2.63M ($2.31M as PI) in funding from federal agencies (NSF), state agencies (New Jersey Council for Humanities), private foundations (PSEG Foundation), private companies (HP, Sun Microsystems), professional organizations (SPIE), and internal programs, over 70 publications and many more presentations in a diversity of venues.
- Successful management of projects (development, securing funding, managing budgets, developing and delivering activities, etc) including ones focused on student professional development (Research Experience for Undergraduates Sites and Supplements, Technology for Teaching) or on equipment acquisition and deployment (Major Research Instrumentation). Director of the Computational Sensing Laboratory.
- Mentored 40 graduate, 29 undergraduate students as well as high school students leading to co-authored publications, graduate thesis and projects, and independent studies. Member of doctoral committee at multiple universities. Doctoral Faculty in the Environmental Management Program at MSU.
- Developed / revised / taught graduate and undergraduate courses representing most of Computer Science and Information Technology Curriculum. Introduced the first courses in Computer Security, Big Data, Robotics, and Computer Forensics at MSU.
- Faculty advisor to Computer Science and Information Technology students.
- Outreach in campus, local community, including high, middle and elementary schools.
- Chaired search committees, member of Departmental Personnel Action committee (tenure, reappointment, and promotion)
- External evaluator and reviewer for leading professional journals and conferences, funding agencies, tenure and promotion applications.

Program Director-IPA (Rotator), National Science Foundation, Directorate of Computer Information Science and Engineering (CISE), Office of Advanced Cyberinfrastructure (OAC) 01/2018 – 01/2021

- Developed and managed portfolio of awards that enable research cyberinfrastructure (CI) development and acquisition as well as Core CI research. Portfolio was diverse in terms of type of CI (data / software / clusters / cloud) and award size, involved both independent and collaborative projects funded under standard, supplemental, or cooperative agreement funding. Portfolio snapshot: 200 awards totaling over $150M (June 2020).
- Managed full proposal pipeline (from proposal receipt to review and recommendation) independently or as part of a group of program directors. Met or exceeded performance targets for processing. Programs include OAC

Core Research, Cyberinfrastructure for Sustained Scientific Innovation (CSSI), Major Research Instrumentation (MRI).

- Lead for CSSI program, the largest OAC led NSF cross-cutting program. Coordinated weekly NSF-wide WG meetings for CSSI. Coordinated weekly OAC WG meetings for CSSI. Coordinated proposal review, co-reviewed and recommended co-funding proposals with colleagues across NSF. Coordinated CSSI communication (including PI webinars, panelist webinars, common email, etc.) Led solicitation revisions, streamlined operations across the program.
- Significant coordinating role for the OAC COVID-19 RAPID response efforts (under NSF Dear Colleague Letter 20-055) including reviews, proposal recommendations and award management.
- Supported NSF's educational programs, such as management of review panels for the Graduate Research Fellowship Program (GRFP) applications.
- Continuous commitment to diversity and inclusion through various initiatives, including participation in the development of the Dear Colleague Letter: Fairness, Ethics, Accountability, and Transparency: Enabling Breakthrough Research to Expand Inclusivity in Computer and Information Science and Engineering Research (NSF 19-016). Active member and OAC representative in the working group that generated and is managing the Computer and Information Science and Engineering Minority-Serving Institutions Research Expansion Program (CISE-MSI) (NSF 21-533).
- Contributor to outreach activities (including participating and presenting at two NSF Grants Conference, EPSCoR PI Meeting, CISE Career Workshop, CISE Minority Serving Institutions Convening, volunteering at the USA Science & Engineering Festival, member of the NSF Speakers Bureau).
- Engaged the PIs and the broader professional CI community by participation in PI meetings and professional conferences, and workshops (including PEARC, CASC Fall and Spring meetings, SC) and through campus visits.
- Active participant in NSF and CISE working groups and committees focused on improving program management efficiency, panel, and reviewer diversity, cloud migration, NSF internal awards and holiday planning,
- Inter-agency collaboration expertise: Co-chair of Middleware and Grid Interagency Coordination (MAGIC) team within the Large-Scale Networking (LSN) Interagency Working Group of the Subcommittee on Networking and Information Technology Research and Development (NITRD), a federal cross-agency initiative.
- Attended intra-agency meetings and workshops (including NITRD BigData, NIST Federal Engagement in Artificial Intelligence Standards Workshop, NIH/NSF collaboration for AI related initiatives).
- Held security clearance.

Assistant Professor, University of New Orleans, Department of Computer Science 09/2002 – 08/2003

- Active researcher with projects funded by university sources resulting in publications, presentations in a diversity of venues. Mentored graduate students in independent research studies.
- Developed / revised / taught graduate courses in Computer and Data Security and Pattern Recognition.
- Outreach in campus and local community.

Visiting Academic

University of Cambridge, Department of Applied Mathematics and Theoretical Physics 05/2018 – 06/2018 / *University of Geneva, Medical Image Processing Group* 08/2017 - 09/2017 / *University of Oxford, Engineering Sciences Department* 01/2011 – 03/2011 / *Uppsala University, Center for Image Analysis* 09/2010 – 12/2010

Graduate Assistant

Syracuse University, Electrical Engineering and Computer Science Department – Research Assistant 05/2000-08/2002, *Teaching Assistant* 08/1998-08/2000 / *University of Iowa, Department of Computer Science – Teaching Assistant* 08/1997-07/1998

HONORS AND AWARDS

- Fulbright Visiting Specialist Roster Candidate (2016-2023)
- Featured Reviewer, ACM Computer Reviews, May 2015
- Annual Best Review Nominee (1 out of 20) ACM Computer Reviews, 2015
- Phi Kappa Phi, April 2011
- Association for Computing Machinery (ACM) Senior Member, January 2010
- Institute for Electrical and Electronics Engineers (IEEE) Senior Member, November 2008
- IEEE Region 1 Award Category 3H For Contributions to the Engineering Profession in Exemplary Service as the LISAT Conference Proceedings Chair, May 2008
- Montclair State University Teaching Fellow 2008-2009
- Montclair State University, Leadership Associate 2008
- Who's Who America's Teachers and Educators 2007
- Who's Who in America 2006
- Richard Tapia Celebration of Computing Conference Scholarship, Association for Computing Machinery (ACM), October 2005
- Faculty Scholarship Program, Montclair State University 2004 - present
- Wilbur LePage Scholarship for Outstanding Doctoral Candidate in Engineering, Syracuse University, Syracuse, NY, August 2002
- Syracuse University Graduate Summer Fellowship, Syracuse, NY, June 2000 – July 2000
- The Soros Foundation for an Open Society Travel Award, Iasi, Romania, August 1997
- Romanian Ministry of Education National Scholarship and Fellowship, Iasi, Romania, 1992 – 1997

PROFESSIONAL DEVELOPMENT

- Harvard Institutes for Higher Education — *Aligning Strategic Priorities with Financial Resources in Higher Education (SPFR)*, Jan 2022
- Franklin Covey — *Leading at the Speed of Trust Course*, Dec 2020
- American Management Association — *Comprehensive Project Management Course*, Sep 2020
- Montclair State University — *Certificate for Teaching Online and Hybrid*, Jul 2014
- Computing Research Association — *Leadership in Science Policy Institute (LiSPI)*, Apr 2013

GRANTS

External Funding

1. 2022-2025 "Collaborative Research: RET Site: Data Sciences and Data Fluency in Scientific Data Sets (DATA3)", Co-PI, *National Science Foundation,* CNS-2206885, $560,110
2. 2022-2024. "Montclair State University CS Education Hub (MSU CS Hub)", senior personnel, *NJ CS for All: Expanding Professional Learning Competitive*, $333,335.
3. 2022-2024. "Montclair State University CS for Everyone Everywhere (MSU CSEE) Program", senior personnel, *NJ CS for All: Implementing the 2020 Computer Science Student Learning Standards Competitive*, $330,330.
4. 2018-2021. "Intergovernmental Personnel Act (IPA) Assignment, CISE / OAC", PI, *National Science Foundation*, $701,202
5. 2017-2018. "Roboto-san: The contrasting visions of Artificial Intelligence and Robotics in Japanese and Western culture", Co-PI, *New Jersey Council for Humanities*, $20,000
6. 2016-2019 "Acquisition of a High-Performance Computing Environment for Advancement of Computational Science Research and Education", PI, *National Science Foundation,* CNS-1625636, $497,057
7. 2012-2015. "MRI: Acquisition of an Imaging System for the Study of Complex Fluids", Senior Personnel, *National Science Foundation,* CBET- 1229113, senior personnel, $171,135

8. 2012-2014. “REU Supplement - MRI: Acquisition of a High-Performance Computer Cluster Supporting Computational Science Research and Learning”, PI, *National Science Foundation,* CNS- 1219307, $18,965
9. 2011-2014. “Decision Support System (DSS) for IT Management”, PI, *PSE&G (Public Service Enterprise Group) Technology Demonstration Grant Program*, PI, $218,000
10. 2010-2014. “Montclair REU Site in Imaging and Computer Vision (iMagine)”, PI, National *Science Foundation*, IIS-1004447, $287,760
11. 2010-2013. “MRI-R2: CSAM Acquisition of Scientific Computing Capacity”, senior personnel, *National Science Foundation,* DMS-0959461, $129,000
12. 2009-2013. “MRI: Acquisition of a High-Performance Computer Cluster Supporting Computational Science Research and Learning”, PI, *National Science Foundation,* CNS-0922644, $190,010
13. 2007-2010. “Montclair REU Site in Imaging and Computer Vision (iMagine)”, PI, *National Science Foundation*, IIS-0648814, $260,000
14. 2006-2007. “MobilITy - Using Tablet PCs in the IT”, PI, *Hewlett-Packard Technology Grant* - U06TFH0014, $70,000
15. 2006-2007. “A New Course in Pattern Discovery”, PI, *The International Society for Optical Engineering (SPIE) Educational Grants* - $2,500
16. 2005-2006. “Efficient Hyperspectral Image Processing”, PI, *Sun Microsystems Academic Excellence Grant Program* T-US-697950-C- $35,755
17. 2005-2006. “Promoting Optics and Imaging Through Outreach Activities”, PI, *The International Society for Optical Engineering (SPIE) Educational Grants* - $2,000
18. 2005. “Participation to the SPIE’s Imaging Science Symposium”, PI, *The International Society for Optical Engineering (SPIE) Technical Programs Committee* - $465
19. 2004. “Participation to the SPIE’s Defense and Security Symposium”, PI, *The International Society for Optical Engineering (SPIE) Technical Programs Committee* - $415
20. 2004-2005. “Center for Optics and Imaging Education”, PI, *The International Society for Optical Engineering (SPIE) Educational Grants* - $3,000
21. 2002. *Society for Optical Engineering (SPIE)* Student Travel Grant - $490

Internal Funding

1. 2016-2017. “Roboto-San: The Contrasting Visions of Artificial Intelligence and Robotics in Japanese and Western Culture, Japan”, Co-PI, *Montclair State University*, Global Education Grants Program - $2,500
2. 2014-2015. “Social Network Data Integration for Cybersecurity”, PI, *Montclair State University*, Separately Budgeted Research Program - $4,000
3. 2014-2015. “CUDA GPU and Efficient Processing of Remote Sensing Data”, PI, *Montclair State University, CSAM Sokol Faculty / Student Research Program* - $2,000
4. 2012. “Participation in the IEEE ICALT 2012”, PI, *Montclair State University – Global Education Grants* - $800
5. 2009-2010. “Hyperspectral Image Acquisition System”, PI, *Montclair State University – Grant Proposal Development Program* - $2000
6. 2009. “Participation in the IEEE IGARSS 2009”, PI, *Montclair State University – Global Education Grants* - $800
7. 2007. “Participation in the IEEE IGARSS 2007”, PI, *Montclair State University – Global Education Grants* - $800
8. 2006-2007. “Efficient Use of RFID Technology for Equipment Tracking”, PI, *Montclair State University – Student Faculty Research Projects* - $1,500
9. 2006. “Participation in the ACM ITiCSE 2006”, PI, *Montclair State University – Global Education Grants* - $800
10. 2006-2007. “A Query System for Remote Sensing Data”, PI, *Montclair State University, CSAM Sokol Faculty / Student Research Program* - $2,000
11. 2005. “Participation in the IEEE ISSCS 2005”, PI, *Montclair State University – Global Education Grants* - $800

12. 2005-2006. “Real Time Feature Extraction for Remote Sensing”, PI, *Montclair State University – Separately Budgeted Research* - $2,000
13. 2004-2005. “Hyperspectral Image Acquisition”, PI, *Montclair State University – Student Faculty Research Projects* - $2,000
14. 2004-2005. “Remote Sensing Data Processing in a Distributed Environment”, PI, *Montclair State University – Separately Budgeted Research* - $2,000
15. 2002-2003. “Employment of Multimedia and Internet in Teaching Computer Science”, PI, *University of New Orleans – Faculty Initiative for Technology in Teaching* - $3,250
16. 2001. *Syracuse University Travel Grant* - $500

PUBLICATIONS AND PRESENTATIONS

Peer Reviewed Publications

*denotes undergraduate students, +denotes graduate student

1. J. Gallino+, S. A. Robila, “HyperGiX – A User Friendly Open-source Hyperspectral Imagery Application”, *Proceedings IEEE IGARSS*, pp. 1-4, 2022
2. E. Zharri+, S.A. Robila “Shiny Dashboard - NYC Trees Benefit Estimation”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-6, 2022
3. S. Vollmin+, S.A. Robila “A Machine Learning Utility for Detection of Potential Protected Health Information Images”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2022
4. R. DePascale+, S.A. Robila “A Semantic Text Processing System for Free-Write English Papers”, *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 1-8, 2022
5. A. Saxena+, S.A. Robila “Analysis of the New York City’s Vehicle Crash Open Data”, *Proceedings IEEE International Conference on Big Data (Big Data)*, pp. 1-3, 2021
6. O. Alkhalili+, S.A. Robila “Tracking the Impact of Fake News on US Election Cycles”, *GoodIT '21: Proceedings of the Conference on Information Technology for Social Good*, pp 192–197, 2021.
7. S.A. Robila, D. Grant, C. DePrater, V. Sorell, T. Rogers, D. Martinez and S. Novotny “Cooling the Data Center: Design of a Mechanical Controls Owner Project Requirements (OPR) Template”, *Proceedings IEEE Cluster 2021, EE HPC SOP 2021: Energy Efficient HPC State of the Practice Workshop*, pp. 1-6, 2021
8. M. Robila and S. A. Robila. "Applications of Artificial Intelligence Methodologies to Behavioral and Social Sciences." *Journal of Child and Family Studies,* vol. 29, no. 10, pp. 2954-2966, 2020.
9. Z. Aziz+, S.A. Robila “Interface for Querying and Data Mining for NYC Yellow and Green Taxi Trip Data”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2019
10. I. Gaidukova+, Priyanka Phapale+, S.A. Robila “Visualizing Weather Financial Impact on Industries and Weather Derivatives”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2019
11. B. Pasione+, S.A. Robila “Digital Piracy, Technology, the Legal System and Computing Education”, *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, 2018, pp. 133-136, 2018
12. K. Handelli+, S.A. Robila “A Cybersecurity High School Curriculum Guide”, *Proceedings Society for Information Technology & Teacher Education International Conference (SITE)*, pp. 864-869, 2018
13. K. Handelli+, S.A. Robila “Design, development and testing an academic repository”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, 2018, pp. 1-7, 2018
    Best Technology Track Paper
14. P. Persaud*, A. Varde, S.A. Robila, “Enhancing Autonomous Vehicles with Commonsense: Smart Mobility in Smart Cities”, *Proceedings IEEE ICTAI*, 1-5, 2017
15. K. Miller+, S.A. Robila “LIDAR for Scribbler 2- Enhancing Sensing Capabilities in an Educational Robot”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, 1-5, 2017
16. E. Bilgin+, S.A. Robila “Road Sign Recognition System on Raspberry Pi”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, 1-5, 2016
17. M. Butler+, S.A. Robila “Interface for Querying and Data Mining for the IMDb Dataset”, *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, 1-5, 2016

18. M. Pawlish, A. Varde, S.A. Robila, "The Greening of Data Centers with Cloud Technology", *International Journal of Cloud Applications and Computing*, 5(4), 1-23, October-December 2015
19. F.K. Muriithi, D. Yu, S.A. Robila, "Vegetation response to intensive commercial horticulture and environmental changes within watersheds in central highlands, Kenya, using AVHRR NDVI data", *GIScience & Remote Sensing*, 2015
20. M. Pawlish, A. Varde, S.A. Robila, C. Alvarez, C. Fleischl, G. Serviano, "GreenDSS tool for data center management", *Int. Conf. on Information and Communication Systems (ICIS),* pp. 1-6, 2014
21. M. Pawlish, A. Varde, S.A. Robila, A. Ranganathan, "A call for efficiency in data center", *SIGMOD*, vol 43 no. 1, pp. 45-51, 2014
22. S. A. Robila, D. Ricart+, "Distributed Algorithms for Unmixing Hyperspectral Data using Nonnegative Matrix Factorization with Sparsity Constraints", *Proceedings IEEE IGARSS*, in pp. 2156-2159, 2013
23. S. A. Robila, K. Pirate*, T. Hall*, "Impact of spatial complexity preprocessing on hyperspectral data unmixing" *Proc. SPIE 8743, Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XIX,* pp. 1-7., 2013
24. M. Pawlish, A. Varde, S.A. Robila, "Decision Support in Data Centers for Sustainability", *Proc.IEEE Int. Conference on Data Mining Workshops (ICDMW)*, 2013, pp. 613-620
25. S. A. Robila, "Introducing Green Computing to General Education" *Proceedings of Society for Information Technology & Teacher Education Int. Conference (SITE)*, pp. 78-83, 2013.
26. M. Pawlish, A. Varde, S.A. Robila, "Cloud Computing for Environment Friendly Data Centers", *Proceedings International Workshop on Cloud Data Management CloudDB*, 2012, pp. 43-48
27. S. A. Robila, "Linear unmixing-based feature extraction for hyperspectral data in a high-performance computing environment" *Proceedings SPIE Optics and Photonics* vol. 8515, pp. 1-6, 2012
28. S. A. Robila, "A Sustainability Component for a First-Year Course for Information Technology Students" *Proceedings Int. Conf. on Advanced Learning Technologies 2012 ICALT,* pp. 90-94.
29. M. Pawlish, A. Varde, S.A. Robila, "Analyzing Utilization Rates in Data Centers for Optimizing Energy Management", *Proceedings Int. Green Computing Conference IGCC*, 2012, pp. 1-6.
30. S. A. Robila, M. Chang*, and N. Damico*, "Face Recognition using Spectral and Spatial Information" *Proceedings SPIE Optics and Photonics,* vol. 8135, pp. 8135Q-8., 2011
31. J. Peng, G. Seetharaman, W. Fan, S.A. Robila, and A. Varde, "Chernoff Dimensionality Reduction--Where Fisher Meets FKT". *Proceedings of SIAM International Conference on Data Mining*, pp. 271-282, 2011
32. S. A. Robila, G. Busardo+, "Hyperspectral Data Processing in a High Performance Computing Environment" *in Proceedings IEEE PDSEC IPDPS,* 2011, pp. 1424-1431, 2011
33. J. Peng, S.A. Robila, F. Wei, G. Seetharaman, "Analysis of Chernoff criterion for linear dimensionality reduction", *Proceedings IEEE Conference on Systems Man and Cybernetics (SMC)*, pp. 3014-3021, 2010
34. J. Peng, S.A. Robila, W. Fan, G. Seetharaman, "Margin Based Dimensionality Reduction and Generalization", *The Open Journal of Artificial Intelligence*, vol. 4, pp. 55-64, 2010
35. S. A. Robila, "Considerations on Unsupervised Spectral Data Unmixing and Complexity Pursuit", *Proceedings IEEE IGARSS*, pp. 987 – 990, 2010
36. S. A. Robila, M. Butler+, "Parallel Unmixing of Hyperspectral Data Using Complexity Pursuit", *Proceedings IEEE IGARSS*, pp. 1035-1038, 2010
37. G. Roughton*, A.S. Varde, S.A. Robila, and J. Liang, "A feature-based approach for processing nanoscale images," in *Proceedings SPIE Scanning Microscopy*, vol. 7729, pp. 772911-9, 2010
38. A. Wimberly*, S. A. Robila, and T. Peplau*, "Spectral face recognition using orthogonal subspace bases," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XVI*, vol. 7695, pp. 76952E-10, 2010
39. B. Kaipa+, S.A. Robila, "Statistical Steganalyis of Images Using Open-Source Software " *Proceedings IEEE LISAT 2010*, pp.1-5, 2010
40. S. A. Robila, "Band reduction for hyperspectral imagery processing," *in Proceedings SPIE Computational Imaging VIII*, vol. 7533, pp. 75330W-9, 2010
41. S. A. Robila, "Spectral Image Processing Using Sparse Linear Transforms", *Proceedings IEEE IGARSS*, pp. IV-534-7, 2009
42. S.A. Robila, "Quo vadis face recognition: Spectral considerations," *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp.1-5, 2009

43. S. A. Robila*, A. LaChance*, and S. Ruff, "Investigating face recognition from hyperspectral data: impact of band extraction," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XV*, vol. 7334, pp. 73341Y-10, 2009
44. M. Schockling*, R. Bonce*, A. Gutierrez, and S. A. Robila, "Visualization of hyperspectral images," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XV*, vol. 7334, pp. 733423-12, 2009
45. D. Wang, L. Xu, J. Peng, S.A. Robila, "Subdividing Hexagon-Clustered Wireless Sensor Networks for Power Efficiency", *Proceedings IEEE International Conference on Communications and Mobile Computing*, pp. 454-458, 2009
46. S. A. Robila, L. G. Maciak+," Considerations on Parallelizing Nonnegative Matrix Factorization for Hyperspectral Data Unmixing", *IEEE Geosciences and Remote Sensing Letters* , vol. 6, no. 1, pp. 57-61, 2009
47. C. A. Neylan*, T. Rush*, A. Gutierrez, and S. A. Robila, "Hyperspectral image processing: a direct image simplification method," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery XIV*, vol. 6966, pp. 69661Y-9, 2008
48. S. Sidiqui+, S. A. Robila, J. Peng, D. Wang, "Sparse Representations for Hyperspectral Image Classification", *Proceedings IEEE IGARSS 08*, vol.2, no., pp.II-577-II-580, 2008
49. S. A. Robila, "Toward hyperspectral face recognition," *in Proceedings SPIE Image Processing: Algorithms and Systems VI*, vol. 6812, pp. 68120X-9, 2008
50. S. A. Robila and N. A. Senedzuk+, "Grid computing for hyperspectral data processing," *in Proceedings SPIE Next-Generation Spectroscopic Technologies*, vol. 6765, pp. 67650A-9, 2007
51. S. A. Robila, B. G. Wachsmuth, C. Scharff, and J. L. Popyack, "Mobile instructional laboratory environments and their use in computing sciences", *Journal of Computing in Colleges*, vol. 23, no. 3, 114-118, 2008
52. J. Peng, S. A. Robila, "Weighted Additive Criteria for Linear Dimension Reduction", *Proceedings IEEE ICDM*, pp.619-624, 2007
53. S. A. Robila, "Information Disclosure Incidents and Computer Security Education", *Proceedings ASEE MidAtlantic Conference*, 7 pgs on CD, 2007
54. S. A. Robila, L. Maciak+, "Sequential and Parallel Feature Extraction using Nonnegative Matrix Factorization", *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2007
55. S. A. Robila, "New Developments in Target Detection in Hyperspectral Imagery Using Spectral Metrics and Spectra Extraction", *Proceedings ASPRS National Conference*, 11 pgs on CD, 2007
56. S. A. Robila and L. G. Maciak+, "A parallel unmixing algorithm for hyperspectral images," *in Proceedings SPIE Intelligent Robots and Computer Vision XXIV: Algorithms, Techniques, and Active Vision*, vol. 6384, pp. 63840F-11, 2006
57. S. A. Robila, "A Class of Detection Filters for Targets and Anomalies in Multispectral / Hyperspectral Imagery", *Proceedings IEEE CVPR,* 132-140, 2006
58. S. A. Robila, "Use of Remote Sensing Applications and its Implications to the Society", *Proceedings IEEE ISTAS*, 1-6, 2006
59. J. Ragucci*, S. A. Robila, "Social Aspects of Phishing", *Proceedings IEEE ISTAS*, 1-5, DOI: 10.1109/ISTAS.2006.43758935, 2006
60. S. A. Robila, L. Maciak+, "Novel Approaches for Feature Extraction in Hyperspectral Images", *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2006
61. S. A. Robila, J. Ragucci*, "Don't be a Phish: Steps in User Education", *Proceedings ITiCSE,* 237-241, 2006.
62. S. A. Robila, "Real Time Processing of Hyperspectral Images", *Proceedings ASPRS Annual Conference*, 5 pgs. on CD, 2006
63. S. A. Robila, A. Kumar, G. Trajkovsi, J. Popyack, S. Poger, "Undergraduate Research – Students' Rewards and Challenges", *Journal of Computing in Colleges*, vol. 21, no. 2, 166-171, 2005
64. S. A. Robila, "Using Spectral Distances for Speedup in Hyperspectral Image Processing", *International Journal of Remote Sensing*, vol 26, no. 24, 5629-5650, 2005
65. S. A. Robila, A. N. Kumar, D. Baldwin, C. Bates Congdon, "Considerations on Undergraduate Computer Science Research", *Journal of Computing in Colleges*, vol. 20, no. 5, 91-95, 2005
66. S. A. Robila, C. Bredlau, "Writing Requirements in Computer Security", *in Proceedings ACM SIGITE,* 385-386, 2005

67. S. A. Robila, "Distributed Computing and Computer Security Education", *in Proceedings ACM SIGITE,* 383-384, 2005
68. S. A. Robila, A. Gershman*, "Spectral Matching Accuracy in Processing Hyperspectral Data", *in Proceedings IEEE ISSCS,* 163-166, 2005
69. S. A. Robila, "Interdisciplinary Undergraduate Research with Focus on Hyperspectral / Multispectral Imagery", *ASEE Mid-Atlantic Conference*, 11 pgs. on CD, 2005
70. S. A. Robila, "An Investigation of Spectral Metrics in Hyperspectral Image Preprocessing for Classification", *Proceedings ASPRS Annual Conference*, 9 pgs., 2005
71. S. A. Robila, "Subpixel target detection in hyperspectral data using higher order statistics source separation algorithms," *in Proceedings SPIE Computational Imaging III*, vol. 5674, pp. 424-431, 2005
72. S. A. Robila, "An Analysis of Spectral Metrics for Hyperspectral Image Processing", *IEEE Geoscience and Remote Sensing Symposium, IGARSS*, vol. 5, 3233-3236, 2004
73. S. A. Robila, "Distributed Processing of Hyperspectral Images", *Proceedings ASPRS Annual Conference*, Denver, CO, 4 pgs. on CD, 2004
74. S. A. Robila, "Distributed source separation algorithms for hyperspectral image processing," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery X*, vol. 5425, pp. 628-635, 2004
75. S. A. Robila, "Higher Order Statistics Based Feature Extraction for Hyperspectral Images", *Proceedings ASPRS Annual Conference*, 1 pg. on CD, 2003
76. S. A. Robila, "Investigation of Spectral Screening Techniques for Hyperspectral Image Processing", *Proceedings ASPRS Annual Conference*, 1 pg. on CD, 2003
77. S. A. Robila, "Investigation of spectral screening techniques for independent-component-analysis-based hyperspectral image processing," *in Proceedings SPIE Algorithms and Technologies for Multispectral, Hyperspectral, and Ultraspectral Imagery IX*, vol. 5093, pp. 241-252, 2003
78. S. A. Robila and P. K. Varshney, "Further results in the use of independent component analysis for target detection in hyperspectral images," in Proceedings SPIE Automatic Target Recognition XIII, vol. 5094, pp. 186-195, 2003
79. C. A. Shah, M. K. Arora, S. A. Robila, P. K. Varshney, "ICA Mixture Model based Unsupervised Classification of Hyper-Spectral Imagery", *IEEE Applied Imagery Pattern Recognition Workshop*, Washington D.C., pp. 29-35, 2002
80. S. A. Robila, P. K. Varshney, "A Fast Source Separation Algorithm for Hyperspectral Imagery", *IEEE Geoscience and Remote Sensing Symposium, IGARSS,* vol. 6, pp. 3516 –3518, 2002
81. S. A. Robila and P. K. Varshney, "Target detection in hyperspectral images based on independent component analysis," in *Proceedings SPIE Automatic Target Recognition XII*, vol. 4726, pp. 173-182, 2002
82. S. A. Robila, T. Achalakul, P. Halaand, and S. Taylor, "Exploring Independent Component Analysis for Remote Sensing", *Workshop on Multi/Hyper-spectral sensor, Measure, Modeling, and Simulation*, 8 pgs. on CD, 2000
83. S. Taylor, T. Achalakul, J. Lee, K. Lhee, S. A. Robila, "Resilient Remote Sensing", *National Symposium on Sensor and Data Fusion*, 7 pgs., 2000

Book Chapters

1. S. A. Robila, "Spectral Screened Orthogonal Subspace Projection for Target Detection in Hyperspectral Imagery", in R. Hammoud editor, *Augmented Vision Perception in Infrared Algorithms and Applied Systems*, Springer, 2008, pp. 173-196.
2. J. W. Ragucci*, S. A. Robila, "Designing Antiphishing Education", in M. Gupta and R. Sharman (Eds.), *Handbook of Research on Social and Organizational Liabilities in Information Securities*, peer reviewed chapter, IGI Global, 2008, pp. 257-278.
3. S. A. Robila, "A Maximum Spectral Screening (MSS) Algorithm for Target Detection", in C-. I., Chang editor, *Advances in Hyperspectral Imagery*, Research Signpost, 2006, pp. 297-326.
4. S. A. Robila, "Independent Component Analysis (ICA)", in P.K. Varshney, M.K. Arora editors. *Advanced Image Processing Techniques for Remotely Sensed Hyperspectral Data*, Springer, New York, 2004, pp. 109 - 132.

5. S. A. Robila, P. K. Varshney, "Extracting Features from Hyperspectral Data Using ICA", in P.K. Varshney, M.K. Arora editors. *Advanced Image Processing Techniques for Remotely Sensed Hyperspectral Data*, Springer, New York, 2004, pp. 199 - 216.

Invited Publications

1. S. A. Robila, "Future of Imaging: What Comes Next?" – invited contributor, *Advanced Imaging Magazine*, vol. 20, No. 1, 2005, pp. 34-36.
2. F. Rivera*, D. Schemly*, I. Yussim*, S. A. Robila, "Spyware Study", Technical Report, Montclair State University / Anti-Kelogger.org, http://anti-keylogger.org/articles.cgi?in= Spyware_Study&id=15, anti-keylogger.org, posted by invitation.

Professional Peer Reviewed Presentations / Abstracts

1. M. Robila, S.A. Robila, "Artificial Intelligence Methodologies in Examining Human Development and Family Functioning". *American Psychological Association Convention*, virtual, August 2020.
2. M. Robila, S.A. Robila, "Using Artificial Intelligence and Machine Learning in Supporting Families in an International Context". *Annual Conference of the National Council on Family Relations*, Fort Worth, TX, November 2019.
3. S.A. Robila, "An Energy Efficiency Focused Analysis of Cloud, Edge and Fog Computing Environments", *IEEE International Conference on Edge Computing and Scalable Cloud*, Paris, France, June 2019
4. M. Butler, S. A. Robila, "Building Big Data Skills through Practice – Extraction, Querying and Data Mining of the IMDb Dataset". *New Jersey Big Data Alliance Symposium*, Montclair, NJ, March 2016
5. S. A. Robila, "Feature extraction for remote sensing data using massive parallel processors". *World Weather Open Science Conference,* Montreal, QC*,* August 2014
6. S. A. Robila, "Computational Sensing Laboratory: Research and Education in Large Data Sets". *New Jersey Big Data Alliance Symposium*, Piscataway, NJ, April 2014
7. S. A. Robila, "Analysis of Industrial Visits as Component of Undergraduate Research Activities", *Council on Undergraduate Research Annual Conference*, Ewing, NJ, June 2012
8. K. Herbert, J. Fails, E. Hill, M. Oudshoorn, S. A. Robila, "Research Transcending Historic Disciplinary Boundaries", *Council on Undergraduate Research Annual Conference*, Ewing, NJ, June 2012
9. S. A. Robila, "Linear Sparse Feature Extraction Transforms for Remote Sensing Images", *ASPRS Annual Conference*, Portland, OR, May 2008
10. S. A. Robila, M. D. Islam*, "HYPDB - A Query System for Remote Sensing Data", *ASPRS Annual Conference*, Portland, OR, May 2008
11. M. Robila, S. A. Robila, "Developing an Interdisciplinary Partnership in Using Technology in Teaching", *Teaching in Higher Education Forum (THE 2003)*, Baton Rouge, LA, April 2003
12. S. A. Robila, P. K. Varshney, S. Taylor, "Feature Extraction for Hyperspectral Images Using Independent Component Analysis", *Fifth International Airborne Remote Sensing Conference and Exhibition*, Miami, FL, May 2002

White Paper

1. A. Varde, S. A. Robila, M. Weinstein, "Green Data Centers for Sustainability", *National Institute of Standards (NIST) Technical Innovation Program Energy White Paper,* 10 pgs online, 2010

Review Publications (editor reviewed)

ACM Computing Reviews (www.reviews.com)

1. S. A. Robila, Book review of Compressed sensing for distributed systems, Coluccia G., Ravazzi C., Magli E., Springer, 2015, in press
2. S. A. Robila, Article review of "Unsupervised methods for the classification of hyperspectral images with low spatial resolution", Villa A., Chanussot J., Benediktsson J., Jutten C., Dambreville R., Pattern Recognition 46 (6): 1556-1568, 2013.g, Jan 2015.
3. S. A. Robila, Article review of "WISEngineering: Supporting precollege engineering design and mathematical understanding" Chiu J., Malcolm P., Hecht D., Dejaegher C., Pan E., Bradley M., Burghardt M. Computers & Education 67: 142-155, 2013, Sep 2014

4. S. A. Robila, Article review of "Learning group-based dictionaries for discriminative image representation" Lei H., Mei K., Zheng N., Dong P., Zhou N., Fan J. Pattern Recognition 47(2): 899-913, 2014, Aug 2014
5. S. A. Robila, Book review of Computer Security, Gollmann D., Wiley, 2011, Oct 2012
6. S. A. Robila, Book review of Beginning digital image processing: Using Free Tools for Photographers, Montabone S., Appres, 2010, Jun 2012.
7. S. A. Robila, Article review of "Visual enhancement of old documents with hyperspectral imaging" Joo Kim S., Deng F., Brown M. Pattern Recognition 44 (7): 1461-1469, 2011, Apr 2012.
8. S. A. Robila, Article review of "Impacts and preferences study for e-HO as a holistic learning environment complementary to e-learning" Lee C., Der Pan P., Liao C. Computers & Education 56 (3): 747-759, 2011, Nov 2011.
9. S. A. Robila, Book review of Murach's Javascript and Dom Scripting, Harris R. Mike Murach & Associates, 2009., May 2011
10. S. A. Robila, Book review of Computable Models, Turner R., Springer 2009, Oct 2010
11. S. A. Robila, Book review of Modeling with data: Tools and Techniques for Scientific Computing, Klemens B., Princeton University Press, May 2010.
12. S. A. Robila, Book review of Advances in computational algorithms and data analysis, Ao S., Rieger B., Chen S., Springer, 2008, Dec 2009.
13. S. A. Robila, Book review of The Burrows-Wheeler Transform: Data Compression, Suffix Arrays, and Pattern Matching, Adjeroh D., Bell T., Mukherjee A., Springer 2008, Oct 2009.
14. S. A. Robila, Article review of "Adaptive course generation through learning styles representation" Sangineto E., Capuano N., Gaeta M., Micarelli A. Universal Access in the Information Society, vol. 7, no. 1, 1-23, 2008, Jun 2009.
15. S. A. Robila, Article review of "Beyond media stickiness and cognitive imprinting: Rethinking creativity in cooperative work and earning with ICTs"**,** Greer R., Barnes A., Education and Information Technologies, vol. 3, no. 12, 123-136, 2007, Nov 2008
16. S. A. Robila, Book review of Eye Tracking Methodology, Theory and Practice, 2nd Edition, Duchowski A. T., Springer, 2007, Oct 2008
17. S. A. Robila, Book review of Data Compression, The Complete Reference, Salomon D, Springer, 2007, Sep 2008
18. S. A. Robila, Book review of Foundations of Fuzzy Control, Jantzen J, John Wiley and Sons, 2007, Aug 2008
19. S. A. Robila, Article review of "Unsupervised band removal leading to improved classification accuracy of hyperspectral images**",** Faulconbridge R., Pickering M., Ryan M., Proceedings Australian Computers Science Conference 2006, Hobart, Australia, Jan 16-19, 43-48, 2006, Feb 2007
20. S. A. Robila, Book review of Handbook of Multibiometrics, Ross A., Nandakumar K., Jain A. Springer-Verlag New York, 2006, Dec 2007 (*Review Highlighted by Editor*)
21. S. A. Robila, Book review of Human Identification Based on Gait, Nixon M., Tan T., Chellappa R. Springer-Verlag New York, 2006, Nov 2007
22. S. A. Robila, Article review of "Benefit of the angular texture signature for the separation of parking lots and roads on high resolution multi-spectral imagery", Zhang Q., Couloigner I. Pattern Recognition Letters 27(9): 937-946, 2006, Sep 2007
23. S. A. Robila, Book review of Advances in Cryptology Proceedings Asiacrypt 2005, Lecture Notes in Computer Science, Roy B. (Ed.), Springer-Verlag New York, 2005, Aug 2007
24. S. A. Robila, Book review of Computer Network Security, Kizza J., Springer-Verlag New York, 2005, Aug 2007
25. S. A. Robila, Article review of "Deploying interactive e-labs for a course on operating systems", Pardo A., Kloos C., Proceedings ACM SIGITE 2006, pp. 71-78, Mar 2007

Other / Non Peer-Reviewed Publications

1. "Uniting Organizations to Expand Computing Research Opportunities" –featured interview, *EdgeDiscovery – Winter/Spring*, pp. 24-27, 2022.
2. S. A. Robila, "Insights from the NSF" –featured interview, *Windows of Opportunity – Newsletter of the Office of Sponsored Programs at Montclair State University – Summer*, pp. 1-2, 2021.

3. "Snapshots A conversation with Computer Science Professor Stefan Robila", *Montclair, the Magazine of Montclair State University – Spring / Summer 2021*, pp. 12-13, 2021.
1. S. A. Robila," True Colors", *CSAM Insights*, Fall 2012, pp. 7
2. S. A. Robila, "Elementary My Dear Watson", *CSAM Newsletter*, Fall 2011, pp. 9
3. S. A. Robila, "Three years of NSF REU at Montclair", *CSAM Newsletter*, Spring 2010, pp. 8
4. S. A. Robila, "2008 NSF iMagine REU", *CSAM Newsletter*, Spring 2009, pp. 9
5. S. A. Robila, S. Brown, "IGARSS08 seeks to connect current and future GOLD members", *IEEE GoldRush*, March 2008, p. 16
6. S. A. Robila, "Mobility – One Year Later", *CSAM Newsletter*, Spring 2008, pp. 9
7. S. A. Robila, "2007 NSF iMagine REU Update", *CSAM Newsletter*, Fall 2007, pp. 6
8. S. A. Robila, " SUN Microsystems Grant's Impact on Computer Science Students", *CSAM Newsletter*, Fall 2007, pp. 7
9. S. A. Robila, "iMagine – NSF REU Grant Received", *CSAM Newsletter*, Spring 2007, pp. 3
10. S. A. Robila, J. Jenq, and D. Deremer, "MobilITy – Using Tablet PCs in the IT", *CSAM Newsletter*, Fall 2006, pp. 8
11. S. A. Robila, "SPIE Grant Awarded to Montclair State University", *CSAM Newsletter*, Fall 2006, pp. 8
12. S. A. Robila, "Sun Microsystems Academic Excellence Grant Awarded to Montclair State University", *CSAM Newsletter*, Spring 2006, pp. 6
13. S. A. Robila, R. Zaritski, "Parallel and Distributed Computing: a Powerful Tool in Modern Computer Science", *CSAM Newsletter*, Fall 2005, pp. 3
14. S. A. Robila, G. Antoniou, A. Gutierrez, "Workshop: Research and Optics: Imaging and Education", *CSAM Newsletter*, Spring 2005, pp. 5
15. S. A. Robila, "SPIE Grant Awarded to the Department of Computer Science", *CSAM Newsletter*, Fall 2004, pp. 8

Invited Presentations

Outside Home Institution

1. S. A. Robila, "Seeking Sustainability for Computing", *ADP Environmental Business Resource Group*, Roseland NJ / virtual, Apr 27, 2022
2. S.A. Robila, "Considerations of Computing Sustainability", *IEX Trading*, New York, NY / virtual, Dec 8 2021
3. S.A. Robila, "Pathway through Computational Science: Research, Service and Administration", *National Science Foundation*, Alexandria, VA, May 24, 2021
4. S.A. Robila, "Research and Education in Computational Sensing and High Performance Computing", *National Science Foundation*, Arlington, VA, May 18, 2017
5. S. A. Robila, "Research and Education Steps towards Green Computing", *Department of Electrical Engineering, Kasetkasert University*, Thailand, July 8, 2016
6. S. A. Robila, "New Directions in Spectral Image Processing", *Gildart Haase School of Computer Sciences and Engineering Seminar Series, Fairleigh Dickinson University,* Teaneck, NJ April 20, 2011
7. S. A. Robila, "Pattern Recognition for Spectral Imaging", *Pattern Analysis and Machine Learning Group, Oxford University*, Oxford, United Kingdom, January 17, 2011
8. S. A. Robila, "Efficient Use of Hyperspectral Imagery", *Center for Image Analysis Seminar Series, Uppsala University,* Uppsala, Sweden, October 25, 2010
9. S. A. Robila, "Hyperspectral Image Processing: New Techniques, New Applications", *Department of Mathematics and Computer Science Seminar Series, Seton Hall University,* South Orange, NJ March 26, 2010
10. S. A. Robila, "Assessing REU programs – Common Application", panelist, *National Science Foundation REU PI meeting*, Charlotte, NC, March 2010
11. S. A. Robila, "2009 iMagine – REU in Imaging and Computer Vision", Poster, *National Science Foundation REU PI meeting*, Charlotte, NC, March 2010
12. S. A. Robila, "2008 iMagine – REU in Imaging and Computer Vision", Poster, *National Science Foundation REU PI meeting*, Arlington, VA, March 2009
13. S. A. Robila, "Hyperspectral Image Processing", *Department of Computer Science Colloquium Series, Rowan University,* Glassborough, NJ, December 10, 2008

14. S. A. Robila, "Efficient Hyperspectral Data Feature Extraction", Armament Research, *Development and Engineering Center (ARDEC)*, Picatinny, NJ, November 10, 2008
15. S. A. Robila, A. LaChance*, S. Ruff*, "Spectral Imaging and Face Recognition", *New Jersey Technology Council Mid Atlantic Imaging Symposium,* Poster, Princeton University, Princeton, NJ, November 2008
16. S. A. Robila, "Recruitment Strategies for REU Sites: Report of the Working Group", *NSF REU PI Meeting,* Poster, Austin, TX, February 29, 2008.
17. S.A. Robila, J. Jenq, D. Deremer, "MobilITy – Using Tablet PCs in the IT", *HP Technology for Teaching International Conference*, Poster, Monterrey Bay, CA, February 2007.
18. S. A. Robila, "Recent Development in Multispectral / Hyperspectral Image Processing", *Math. And Comp. Sci. Colloquia Series*, North Carolina Central University, NC, April 2005
19. S. A. Robila, "Interdisciplinary Research in Computer Science – the Case for Hyperspectral Imagery", Center for Imaging and Optics, *Workshop - Imaging and Optics: Research and Education*, Montclair, NJ, November 2004
20. M. Chopping, S. A. Robila, "Remote Sensing at Montclair State University", *New Jersey Technology Council,* Oral Presentation, Montclair State University, Montclair, NJ, April 2004
21. S. A. Robila, "Employment of Independent Component Analysis for Hyperspectral Image Processing", *Seminar of the Information and Systems Laboratory,* Electrical Engineering Department, University of New Orleans, LA, February 2003
22. S. A. Robila, "Digital Image Processing – Spatial Operations", *Comp. Sci. Dept. Colloquia Series*, University of Nebraska at Kearney, NE, February 2002
23. S. A. Robila, "Source Separation for Multispectral / Hyperspectral Imagery", *Comp. Sci. Dept. Colloquia Series*, University of New Orleans, LA, January 2002

NSF Presentations

1. S.A. Robila, "OAC: Cyberinfrastructure for all of S&E", *CISE Program Director Presentation, AISES / TCU Computer Science Research Convening*, virtual, Dec 2, 2020
2. S.A. Robila, "OAC: Cyberinfrastructure for all of S&E", *CISE Program Director Presentation, CISE MSI-HBCU Workshop*, virtual, Nov 30, 2020
3. S.A. Robila, "Proposal Preparation", panel part of *NSF Virtual Fall Grants Conference*, virtual, Nov 16, 2020
4. S.A. Robila, "OAC: Cyberinfrastructure for all of S&E", *CISE Program Director Presentation, HSI Mini-Ideas Workshop All-Hands Convening*, virtual, Nov 9, 2020
5. S.A. Robila, "Data and Software Cyberinfrastructure Research and Development", *Dean's Scholars Friday Lunch, University of Texas Austin*, Oct 30, 2020
6. S.A. Robila, "NSF Programs in Data and Software Cyberinfrastructure", *CASE /EECS Colloquium Series, Syracuse University*, virtual, Oct 14, 2020
7. S.A. Robila, "Data and Software Cyberinfrastructure Research and Development", *BLIS Retreat 2020, University of Texas Austin*, virtual, Oct 5, 2020
8. S.A. Robila, "Supporting Current and Future Researchers Through Data and Software Cyberinfrastructure", *Computing in Engineering Forum 2020, University of Wisconsin, Madison*, virtual, Sept 29, 2020
9. S.A. Robila, A. Walton, K. Thompson, "The Importance of Investing in Cyberinfrastructure", *2020 NSF EPSCoR PI Meeting*, virtual, May 21, 2020
10. S.A. Robila, "Future Steps of CSSI", *NSF CSSI PI Meeting*, Seattle, WA, Feb 13, 2020
11. S.A. Robila, "Building a Diverse and Sustainable Scientific Cyberinfrastructure Ecosystem", *Data Science Institute Darwin Computing Symposium*, Newark, DE, Feb 12, 2020
12. S.A. Robila, "Small Group Meetings with NSF CISE Program Directors", *NSF Minority Serving Institutions-CISE Conference*, Arlington, VA, Feb 4, 2020
13. S.A. Robila, "NSF Support for Advanced Data and Software Research Cyberinfrastructure", *NIST Interoperability of Web Computational Plugins for Large Microscopy Image Analyses*, Gaithersburg, MD, Dec 5, 2019
14. S.A. Robila, "Proposal Preparation", panel part of *NSF Fall Grants Conference*, Boston, MA, Nov 18, 2019
15. S.A. Robila, "The Directorate of Computer, Information Science and Engineering (CISE)", *NSF Fall Grants Conference*, Boston, MA, Nov 18, 2019

16. S.A. Robila, "Overview of the data-focused CI", *NSF Workshop on Future Directions for the CSSI Program*, Austin, TX, Oct 29, 2019
17. S.A. Robila, "Sustainability and the Advanced Research Cyberinfrastructure", part of Investment on Sustainability Panel, *International Green and Sustainable Computing Conference* (IGSC), Alexandria, VA, Oct 23, 2019
18. S.A. Robila, "Supporting Advanced Research Data and Software Cyberinfrastructure", invited talk, Columbia University, New York, NY, Oct 4, 2019
19. S.A. Robila, "Supporting Advanced Research Cyberinfrastructure", Center for Network and Storage Enabled Collaborative Computation Symposium, University of Michigan, MI, Oct 15, 2018

<u>At Home Institution</u>

1. S. A. Robila, "The Arms Race in Cybersecurity", Webinar, Dept. of Computer Science REU Site, MSU, June 9, 2021
2. Omar Alkhalili, S. A. Robila, "Tracking the Impact of Fake News on US Election Cycles", Panel on Democracy Perspectives from Computer Science: Challenges and Opportunities, MSU, Apr 29, 2021
3. S. A. Robila, "NSF Process and Opportunities", Webinar, Dept. of Computer Science, MSU, Mar 31, 2021
4. S. A. Robila, "Computer Science", Major Madness: Exploring STEM Series, MSU, Mar 15, 2021
5. S. A. Robila, "Seeking Sustainability for Computing", Sustainability Seminar Series, MSU, Mar 15, 2021
6. C. Coutras, S.A. Robila, "Building an Online Graduate Degree - MSU's Masters of Science in Applied Information Technology", Montclair State University Summer Institute for Teaching, Learning & Technology, June 6, 2018
7. S. A. Robila, "Computational Sensing and Applications", LSAMP Student Meeting, MSU, Mar 27, 2014
8. S. A. Robila, "Computational Sensing and Applications", Computer Club, Oral Presentation, MSU, Apr 2, 2014
9. S. A. Robila, "Hyperspectral Imagery and Applications", Physics Club, Oral Presentation, MSU, Apr 14, 2010
10. S. A. Robila, J. Peng, G. Antoniou, A. Gutierrez, A. Varde, S. Wahi, C. Moran*, D. Chromeck*, J. Ginsberg*, C. Myrie*, "Undergraduate Computer Science Research at Montclair: iMagine – REU in Imaging and Computer Vision", *Homecoming, College of Science and Mathematics Reception*, Poster, MSU, Oct 3, 2009.
11. S. A. Robila, "Seeing the Unseen: Spectral Imaging Reveals Secrets", *GK-12 Math and Science Day*, MSU, June 9, 2009
12. S. A. Robila, "Seeing the Unseen: Spectral Imaging", Weston Scholars Open House, MSU, May 2009
13. S. A. Robila, "Processing Beyond the Visible Imagery", *College of Sciences and Mathematics Graduate Showcase,* MSU, Apr 10, 2007.
14. S. A. Robila, "Lessons Learned in the Grant Application Process", *MSU Grant Success Stories Workshop*, MSU, Mar 28, 2007
15. S. A. Robila, "Seeing the Unseen – Hyperspectral Image Processing and Computers Science", *College of Sciences and Mathematics Open House,* MSU, Feb 2004
16. S. A. Robila, "Hyperspectral Image Processing", *College of Sciences and Mathematics Meeting,* MSU, Oct 2003
17. S. A. Robila, C. Shah, T. Achalakul, P. Varshney, "Hyperspectral/Multispectral Imagery Applications", *Kodak Technology Meeting*, Syracuse University, Nov 2001
18. S. A. Robila, "Real Time Multispectral Image Processing Technologies", *Kodak Technology. Meeting*, Syracuse University, Nov 2001
19. S. A. Robila, J. Lee, "Hyperspectral Image Processing", *Syracuse University Open House*, Apr 2001
20. S. Taylor, S. A. Robila, "Real Time Multispectral Image Processing", *Office for Government Relations*, Syracuse University, Nov 2000

<u>Course Guest Lectures</u>

21. S. A. Robila, "Hyperspectral Imaging Technologies", EAES, 2012, 2011, 2009, 2007, 2005

<u>Workshops / Tutorials</u>

- S. A. Robila, "Multidimensional Image Processing", SMUG Faculty Training Workshop, Montclair State University, Montclair, NJ, April 2004

Outreach Talks

1. S. A. Robila, "Computer Security", *PS 144 Jeromus Remsen Elementary School,* Forest Hills, NY, Feb 7, 2017
2. S. A. Robila, "Computational Sensing - Combining the Power of Computers with Robots and Sensors", *Thomas Jefferson Middle School,* Teaneck, NJ, December 13, 2016
3. S. A. Robila, "Robots and Programming", *PS 144 Jeromus Remsen Elementary School,* Forest Hills, NY, December 3, 2015
4. S. A. Robila, "Spectral Imaging (changing the way we look at the world)", *Montclair High School,* Montclair, NJ, November 19, 2015
5. S. A. Robila, "Computer Scientist – Career Day", *PS 144 Jeromus Remsen Elementary School,* Forest Hills, NY, May 15, 2015

TEACHING EXPERIENCE

Montclair State University
(graduate courses are numbered 500 and above)

Intro to Computer Applications	CMPT 109	Fall 2004 - 2006, 2009, 2012, 2013
Fluency with IT		Spring 2006, 2007, Summer 2009
Computational Concepts	CSIT 104	Fall 2014, 2015, 2021, 2022, Spring 2016, 2017
Computer Concepts for IT	CSIT 110	Spring 2010, Fall 2011
Computer Science I	CMPT 183	Fall 2003, 2006-2008, Spring 2004, 2005, 2008
Computer Science II	CMPT 184	Spring 2009, Fall 2011
Discrete Mathematics	CMPT 285	Spring 2004
Operating Systems Concepts	CMPT 481	Spring 2005, 2006, 2008
	CSIT 345	Spring 2021, Fall 2021
	CMPT 583	Spring 2006, 2008
	CSIT 547	Spring 2021, 2022, Summer 2022
Foundations of Programming	CMPT 484	Fall 2013
Languages	CSIT 313	Fall 2014, 2022, Spring 2022
Human Computer Interaction	CSIT 335	Fall 2016
	CSIT 535	Fall 2016
Computer and Data Security	CMPT 495	Fall 2004, 2005
	CMPT 585	Fall 2004, 2005
Internet and Intranet Security	CMPT 320	Spring 2007, 2009, 2010, 2012, 2013, 2014, Fall 2008
	CSIT 460	Spring 2015
Network Security	CSIT 520	Spring 2014, 2015
	CSIT 560	Spring 2016, 2017
Parallel Architectures and	CMPT 495	Spring 2012
Algorithms	CMPT 680	Spring 2012
Pattern Disc. in Large Data Sets	CMPT 495	Fall 2007
	CMPT 585	Fall 2007
Introduction to Robotics	CMPT 495	Spring 2013
	CSIT 431	Fall 2014, Fall 2016
	CSIT 531	Fall 2014, Fall 2016
	CMPT 585	Spring 2013
Computer Forensics	CSIT 495	Fall 2015
Computer Architecture	CMPT 580	Fall 2009, 2012, 2013
Cooperative Education in CS	CMPT 499	Fall 2011, Spring 2012

University of New Orleans
(graduate courses are numbered 6000 and above)

Data Encryption / Cryptography	CSCI 6130	Fall 2002

Pattern Recognition	CSCI 6990	Spring 2003

Syracuse University
(graduate courses are numbered 500 and above)

Introduction to C++	CIS 504	Spring 2000
Intro to programming with C	CIS 196	Spring 1999, Summer 1999
Intro to programming with Pascal	CIS 197	Fall 1998
Computer Architecture (TA)	CIS 655	Fall 1999

University of Iowa

Programming with C	22C010	Spring 1998
	22C110	Spring 1998
Programming with C++	22C012	Summer 1998
	22C112	Summer 1998
Data Structures/OO Programming	22C017	Fall 1997
(TA)	22C117	Fall 1997

STUDENT RESEARCH SUPERVISION

M.S. Theses / Projects

1.	Abhay Kumar	Oct 2022	
2.	Francisco Orejarena	Optical Character Recognition of Maya Glyphs	May 2022
3.	Reginald Georges	NYC Taxi Trip Analysis	May 2022
4.	Hem Raval	Botnet attacks and detection tools analysis	May 2022
5.	Ryan DePascale	Semantic Text Processing System For Free-Write English Papers	Dec 2021
6.	John Gallino	HyperGix: A Hyperspectral Data Application	Dec 2021
7.	Abhishek Saxena	NYC's Vehicle Crash Analysis and Prediction Tool	Dec 2021
8.	Nigel Mason	A System for Nutrition Monitoring for Schools	May 2021
9.	Obinna Ezeadum	Investigation of IoT Security Exploits	May 2021
10.	Andleeb Chaudhri	Exploratory Analysis of Airbnb and Los Angeles Housing Characteristics	May 2020
11.	Michael Perez	Interface for Querying and data analysis of MLB statistics	Dec 2019
12.	Scott Vollmin	Network Scanning Utility for the Detection of PHI and Patient Information in a Medical Enterprise Environment	May 2019
13.	Elona Zhari	Data Mining and Visualization of Big Data	May 2019
14.	Thomas Sullivan	Miniaturizing SCADA Testing for Enterprising Professionals	Mar 2019
15.	Zahid Aziz	Interface for Querying and Data Mining For NYC Yellow and Green Taxi Trip Data	Dec 2018
16.	Priyanka Phapale	Visualizing Weather Financial Impact on Industries	May 2018
17.	Inga Bondarenko	and Weather Derivatives	
18.	Maitr. Kantessaria	HAWK-HYP Implementation and Testing of Distributed Algorithms for Hyperspectral Data on a Computer Cluster	May 2018
19.	Jinfeng Ning	Interface for Querying and Data Processing For the Ratings and Data Processing Dataset	Dec 2017
20.	Kevin Handeli	Departmental Repository for MS Projects	Dec 2017
21.	Adam Schwartz	Implementation and Testing of a High Count Point Application on a Distributed System	May 2017

22. Moinul Sikder	Real Time Database Replication	May 2017
23. Senth. Rajendran	Secured Data Encryption Application for Various File Formats Using Public Images	Feb 2017
24. Greg Giannuario	Internet of Things and Smart Home Security - Security Analysis and Exploitation	Feb 2017
25. Krishna Gurum	Big Data Analytics on Stocks Prediction	Dec 2016
26. Samip Shah	"Noter" A Live Feed Web Application Built Using Mean Stack	Dec 2016
27. Bryan Passione	Digital Piracy, Technology and the Legal System	Dec 2016
28. Laura Morales	Data Mining for Education Assessment	Dec 2016
29. Benjamin Colsey	Nutritional Data for Meal Selection	May 2016
30. Enis Bilgin	Road Sign Recognition using Rasberry Pi	Dec 2015
31. Martin Butler	Interface for Querying Data from the IMDb Dataset	May 2015
32. Nirajan Thapa	Android App for Scribbler Robot	May 2015
33. Kale Evans	Effective Visualization of Hyperspectral Images on a Mobile RGB Display	May 2015
34. Pritesh Parekh	Face Recognition with Android Device	May 2015
35. Daniel Ricart	A HPC Approach to Nonnegative Matrix Factorization for Hyperspectral Data	Dec 2012
36. Gerald Busardo	Benhmarking clusters and Parallel Applications for Hyperspectral Data	Dec 2010
37. Shubhra Mittal	Scientific Repository System	May 2010
38. George Senger	G3Crypt – A Personal Encryption Tool	May 2009
39. Bhargavi Kaipa	Machine Learning in Steganalysis	May 2009
40. Kalpana Pal	Real Time Face Recognition Using Eigenfaces	Dec 2008
41. Juan Sandoval	DAS – Daycare Administration System	May 2008
42. Nick Senedzuk	Harvesting the Power of Grid Computing	May 2007
43. Lukasz Maciak	Nonlinear Matrix Factorization and Hyperspectral Imagery	May 2007
44. Shilpa Venugopal	Interactive Survey Development Kit (ISDK) (*Outstanding Computer Science Graduate 2006*)	Apr 2006

Graduate Thesis Committees

Ph.D. Committee

Darko Radakovic	An integrated CANAPANI and deep learning-based approach for mapping tall shrubs in Arctic tundra. Dept of Earth and Environmental Sciences, (M.. Chopping advisor)	in progress
Khalid Alobaid	Interpretable Machine Learning for Space Weather Analytics, Department of Computer Science, New Jersey Institute of Technology (J. T. L. Wang advisor)	in progress
Faith Justus	An integrated approach to assessing spread of commercial horticulture and related environmental impacts on Watershed: Cases in Central highlands of Kenya, Dept of Earth and Environmental Sciences, (D. Yu advisor)	April 2015
Giovanni Vincenti	Fuzzy Mediation as an Improved Method Towards Machine Learning and Information Fusion, Department of Computer & Information Sciences, Towson University, MD (G. Trajkovski advisor)	May 2007

Ph.D. Thesis Examiner

Deepti Yadav	Approaches for detection and identification of targets using remote sensing data Department of Civil Engineering, IIT Roorkee, India (M. Arora advisor)	March 2017
N. Prabhu	Study of some information extraction techniques for hyperspectral imaging Department of Civil Engineering, IIT Roorkee, India (M. Arora advisor)	Jan 2015

M.S. Committees

Nishok Narasimha	Distr. Network Resource Manager – NetUNIX (C. Coutras advisor)	Dec 2016
Gabrielle Redgate	HIPERLAN Simulation for Research and Ed. (C. Coutras advisor)	Dec 2015
Salman Sidiqui	Sparse Representations for Hyperspectral Data (J. Peng advisor)	May 2008
Marinos Michael	Multiorder Multidimensional Systems Comp. of the Transfer Function Using the DFT (G. Antoniou advisor)	May 2006

Graduate Independent Studies

Enis Bilgin	Cluster Computing for Computer Security	Dec 2014
Rocio Duquesne	Programming Numerical Methods	Dec 2011
Shubhra Mittal	RFID Applications	May 2009
Martin Butler	Hyperspectral Imaging	Dec 2008
Joseph Schicci	RFID Security	May 2006

Undergraduate Independent Studies and Projects

Research Experience for Undergraduates (NSF REU) Projects

Spencer Kordecki	Cluster Based HSI Image Processing	May 2013
Stephen Gallo	Cluster Based HSI Image Processing	May 2013
Cynthia Alvarez	HSI Image Fusion for Visualization	July 2012
Laci Sears	HSI Image Fusion for Visualization	July 2012
Terrance Hall	Spatial Complexity Based NMF for HSI	July 2011
Kimberly Pirate	Spatial Complexity Based ICA for HSI	July 2011
Marco Chang Reyna	Fusion Techniques for Face Recognition in HSI	July 2010
Nisha D'Amico	Fusion Techniques for Face Recognition in HSI	July 2010
Andrew Wimberly	OSP based Face Recognition in HSI	July 2009
Tansy Peplau	OSP based Face Recognition in HSI	July 2009
Shawna Ruff	PCA based Face Recognition in HSI	Aug 2008
Andrew LaChance	ICA based Face Recognition in HSI	Aug 2008
Katherine Rice	HYPFACE Hyperspectral Face Database	July 2007

Selected Independent Studies / Student Projects

Amanda Moctezuma	Video Streaming Parental Controls	Dec 2022
Thai Tao Nguyen	Security Incidents at Colleges and Universities	May 2022
Vincent Cavallaro	Multispectral Camera Design	May 2022
Anthony Castaneda	Data Visualization using VR Headsets	May 2022
Timothy Bull	Image Processing of Manuscripts	May 2022
Solange Lanza Quisbert	Crime Data for Higher Education Institutions	Dec 2021
Victoria Johnson	Robotics Design Using Arduino	May 2015
Michael Estwanick	Hyperspectral Data Processing on GPU	May 2015
Kenneth Abad	Applications of Hyperspectral Image Processing	May 2014

Cynthia Alvarez	Script Based Data Processing for Green Computing	Dec 2013
Christopher Fleischl	Web based Visualization of Environmental Param.	Dec 2013
Genesis Serviano	Heat map Visualization of Data	Dec 2013
Mark Celli	CUDA GPU Applications for Computer Security	Dec 2013
Arti Sojitra	Decision Systems for Green Computing	May 2013
Kaushal Kathwadia	Decision Systems for Green Computing	May 2013
Faris Naffaa	Robotics Design Using Arduino	May 2012
Margaret Kim	Decision Systems for Green Computing	May 2012
John Chang	Using RFID for Equipment Tracking	May 2007
M.D. Islam	A Query System for Remote Sensing Data	Dec 2006
Premyslav Kafara	Incident Response Analysis for University Data	May 2006
James Ragucci	Phishing – Research and Education	May 2006
(Outstanding Computer Science Undergraduate 2006)		
Andrew Gershman	Automated Hyperspectral Data and Capture	Dec 2004

Weston Scholars (Montclair High School)

1.	Nyah Campbell	Vegetation Discrimination in Hyperspectral Data	July 2011
2.	Shannon Hardy	Vegetation Discrimination in Hyperspectral Data	July 2011
3.	Mete Erdi	Fruit Quality Analysis with Hyperspectal Data	July 2011
4.	Ryan Lin	Light Emission and Calibration for Spectral Imaging	July 2011
5.	Dominik Halas	Spectral Similarity Detection	July 2009

Student Presentations

1. T. Thao Nguyen, (S.A. Robila – advisor), "HEIs Under Threat - Evaluating Cyber Attacks and Incident Response at Higher Education Institutions", Student poster, *Sigma Xi Student Research Symposium*, Montclair State University, Montclair, NJ, April 2022
2. A. Castaneda, (S.A. Robila – advisor), "Data Visualization in a Three-Dimensional Space Using XR Technology", Student poster, *Sigma Xi Student Research Symposium*, Montclair State University, Montclair, NJ, April 2022
3. V. Cavallaro, (S.A. Robila – advisor), "Design and Development of a Low Cost Multispectral Camera", Student poster, *Sigma Xi Student Research Symposium*, Montclair State University, Montclair, NJ, April 2022
4. A. Moctezuma, (S.A. Robila – advisor), "Evaluation of Parental Control Features for Video Streaming Services", Student poster, *Sigma Xi Student Research Symposium*, Montclair State University, Montclair, NJ, April 2022
5. S. Lanza Quisbert, (S.A. Robila – advisor), "Visualization of Crime Data for Higher Education Institutions", Student poster, *GS-LSAMP Research Conference*, Montclair State University, Montclair, NJ, Feb 2022
6. M. Estwanick (S.A. Robila – advisor), "Optimal Band Selection in Hyperspectral Data Using GPU", Student poster, Student poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, Holy Cross College, Worchester, MA, April 2015
7. M. Estwanick (S.A. Robila – advisor), "Optimal Band Selection in Hyperspectral Data", *SC15 BE Poster Workshop,* Lawrence Berkeley National Laboratory, Berkeley, CA, April 2015
8. M. Estwanick (S.A. Robila – advisor), "Using Graphical Processing Units for Computing Optimal Band Selection in Hyperspectral Data", Student presentation, *Undergraduate Research Symposium*, Montclair State University, Montclair, NJ, April 2015
9. C. Fleischl, (S.A. Robila – advisor), "The GreenIT Project", Student Poster, *Undergraduate Research Symposium – Techlaunch* , Montclair State University, Montclair, NJ, April 2014
10. C. Fleischl, C. Alvarez, G. Serviano (S.A. Robila – advisor), "The GreenIT Project", Student presentation, *Undergraduate Research Symposium*, Montclair State University, Montclair, NJ, April 2014
11. S. Kordecki, S. Gallo, (S.A. Robila – advisor), "Optimizing approaches for distributed computing based best band selection algorithms for hyperspectral image processing", Student poster, *Undergraduate Research Symposium*, Montclair State University, Montclair, NJ, April 2013

12. S. Gallo, S. Kordecki, (S.A. Robila – advisor), "Optimal Distributed Computing Based Best Band Selection Algorithms for Hyperspectral Image Processing", Student poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, Siena College, Loudonville, NY, April 2013
13. C. Alvarez, T. Sears, (S.A. Robila – advisor), "Fusion Techniques for Hyperspectral Image Visualization", Student poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, Siena College, Loudonville, NY, April 2013
14. T. Hall*, K. Pirate (S.A. Robila – advisor), "Spatial Complexity Based Preprocessing for Hyperspectral Imagery", Student poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, Quinnipiac University, Hamden, CT, April 2012
15. M. Erdi* (S.A. Robila – advisor), "Detection of Ripeness in Bananas using Hyper-spectral Images", *New Jersey Academy of Science Annual Meeting*, April 2012
16. M. Chang-Reyna* (S.A. Robila – advisor), "Investigating Face Recognition using Hyperspectral Images and Principal Components", Student poster, *Consortium of Computing Sciences in Colleges Southeastern Region (CCSCSE)*, Spellman College, Atlanta, GA, November 2010
17. D. Jackowitz* (A. Varde, S.A. Robila – advisors), "Non-metric Distances in Nanoscale Image Mining", Student poster, *Consortium of Computing Sciences in Colleges Eastern Region (CCSCE)*, Juniata College, Huntingdon, PA, October 2010
18. N. Damico* (S.A. Robila – advisor), "Unsupervised Face Recognition using Hyperspectral Images and Spectral Angle", Student poster, *Consortium of Computing Sciences in Colleges Eastern Region (CCSCE)*, Juniata College, Huntingdon, PA, October 2010
19. D. Halas* (S.A. Robila – advisor), "Best Facial Expressions to Use for Increased Facial Recognition by Hyperspectral Imaging", *New Jersey Academy of Science Annual Meeting*, April 2010
20. G. Roughton*, L. McKee* (A. Varde, S.A. Robila – advisors), "Comparing Feature Based and Wavelet Based Approaches to Image Processing", Student poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, University of Hartford, West Hartford, CT, April 2010
21. K. Rice* (S. A. Robila – advisor), "Hyperspectral Face Recognition", *National Science Foundation REU PI meeting*, Austin, TX, February 2008
22. J. W. Ragucci* (S. A. Robila - advisor), "Getting Off the Hook (Learn to Catch the Phish: A Tool for User Education)", Sigma Xi, Montclair, NJ, May 2006
23. P. Kafara* (S. A. Robila - advisor) "Security Data Loss Incidents: Policies and Reaction in Academic Institutions", Sigma Xi, Montclair, NJ, May 2006
24. J. Schicchi+ (S. A. Robila - advisor) "RFID: Security, Privacy, and Effective Application" , Sigma Xi, Montclair, NJ, May 2006
25. D. McCarron* (S. A. Robila - advisor) "Security of Wireless Access Points" , Sigma Xi, Montclair, NJ, May 2006
26. L. G. Maciak+, M. Alexis Ponniah+, R. Sharma+ (S. A. Robila - advisor) "Applying Steganography to Music Captioning - Embedding Lyrics in MP3 Files" , Sigma Xi, Montclair, NJ, May 2006
27. S. Venugopal+ (S.A. Robila – advisor), "Interactive Survey Development Kit", Sigma Xi, Montclair, NJ, May 2006
28. R. Perriero*, S. Jui*, (S. A. Robila - advisor), "Clustering and Computing: A Look at Inexpensive Design Ideas", Sigma Xi, Montclair, NJ, May 2005
29. A. Mohiuddin+, R. Burus+, (S. A. Robila - advisor), "Generating Large Prime Numbers for Cryptographic Algorithms using Distributed Computing", Sigma Xi, Montclair, NJ, May 2005

PROFESSIONAL SERVICE AND DEVELOPMENT

University-based

Montclair State University

University level

National Prestigious Scholarships Committee	Jan 2021	-	present
Institute for Sustainability Studies, Faculty	Jan 2010	-	May 2018

Steering Committee	Jan 2010	-	May 2018
Science Informatics Program, Faculty	Sep 2003	-	May 2016
Passaic River Institute, Faculty	Jan 2004	-	May 2018
Patent Review Committee	Jan 2013	-	May 2018
Lab. Rob. Interest Group, Org Comm. mem.	April 2015	-	May 2018
Reviewer, Student Research Symposium	Feb 2014		
GreenIT Technical Action Comm., Chair	Aug 2009	-	May2010
Career Development Committee, alternate	May 2015-16, May 2011-13		
member	Feb 2004	-	Sep 2005
chair	Mar 2005	-	Mar 2006
Sabbatical Review Committee, member	May 2022	-	May 2023
	May 2013	-	May 2015
alternate	May 2021	-	present
	May 2015-16, May 2011-12, May 2008-09		
University Research Committee, alternate	May 2011	-	May 2013
Academic Computing Committee	Sep 2009	-	May 2010
Honorary Degree Committee	May 2007	-	May 2008
Distinguished Professor Comm., alternate	Sept 2008	-	May 2009
New Student Experience Learning Community Program	Fall 2006, Fall 2007, Fall 2008, Fall 2009, Fall 2011		
College level			
Honors Program Committee	June 2015	-	Jan 2018
MRI Preproposal Committee	Nov 2014	-	Dec 2014
Science Quad Committee	Jan 2014	-	May 2014
School of the Environment	Jan 2014	-	May 2014
Distinguished Teacher Comm.	Sept 2009	-	Aug 2010
Technical Support Specialist Search Committee (CORE)	July 2008	-	Aug 2008
Associate Dean Search Committee	Aug 2008	-	Dec 2008
	Aug 2007	-	Aug 2008
Annual Student Conference Committee	Oct 2007	-	May 2008
Computer Modeling Group, Faculty	Apr 2004	-	Aug 2007
Department level			
Department Liaison for Library	May 2021	-	present
Sabbatical Committee, member	Mar 2021	-	present
Scheduling Committee, member	Mar 2021	-	present
Personnel Action Committee, member	Sep 2014	-	May 2017
chair	Sep 2022	-	present
Curriculum Committee, member	Sep 2014	-	May 2018
Advisor, undergraduate majors	Sep 2004	-	present
Graduate Committee, member	May 2017	-	Mar 2021
	Sep 2012	-	June 2014
Chair Search Committee, member	Jan 2013	-	May 2013
	Sep 2012	-	Dec 2012
Faculty Search Committee, member	Sep 2011	-	May 2012
Chair	Sep 2009	-	May 2010
Steering Committee,	Dec 2006	-	June 2014
Chair	Dec 2006	-	July 2012
Chair	Dec 2014	-	May 2016
Doctoral Program Committee	Apr 2004	-	Jan 2018
Relocation Committee	Apr 2004	-	Aug 2006
Brochure Committee, chair	Jan 2005	-	Aug 2005

Enrollment Committee	Sep 2003	-	Dec 2005
Logo Committee, chair	Apr 2004	-	Mar 2003
Subcommittee on CS 1	Mar 2004	-	May 2004
Hardware Courses Committee	Feb 2004	-	Mar 2004
Coordinator, CCSCE Conference student programming teams	Oct 2003		

University of New Orleans

University level

Leader, Support, First Bank and Trust Advertisement Clip	Apr 2003		
Louisiana Science Olympiad Regional "Compute This" – organizer	Mar 2003		

Department level

Hardware Committee,	Sep 2002	-	Aug 2003

National / Discipline-based

Consultant

The Council of Advisors, GLG	Aug 2004	-	Dec 2019
GLG Education	May 2007	-	Dec 2019

Advanced Placement Computer Science

Certified Reviewer, EPIC	May 2007		
Exam Reader, ETS	June 2007		

ACM Computing Reviews, Reviewer	Mar 2006	-	present
Student Poster Contest Judge, CCSCNE Conference, Providence, RI	April 2005		
Federal Trade Commission / Anti-Phishing Working Group Consumer Education Campaign Committee Member	Aug 2007	-	May 2018
IEEE Mentor Program, Mentor	Apr 2005	-	Apr 2021

Conference Organizing Committees

Technical Program Committee Chair

IEEE 2022 Long Island Systems Applications and Technology Conference (LISAT 2023), Old Westbury, NY, May 2023

Technical Program Committee Vice Chair

IEEE 2022 Long Island Systems Applications and Technology Conference (LISAT 2022), Old Westbury, NY, May 2022

Proceedings Chair

IEEE Long Island Systems Applications and Technology Conference (LISAT 2010), Farmingdale, NY, May 2006, 2007, 2008, 2009, 2010

Student Activities Chair

IEEE International Geosciences and Remote Sensing Symposium, IGARSS 10, Honolulu, HI, July 2010

IEEE International Geosciences and Remote Sensing Symposium, IGARSS 08, Boston, MA, July 2008

Selection Committee

New Jersey Technology Council Mid Atlantic Imaging Symposium, 2009, 2010

Editor

Journal of Next Generation Information Technology (JNIT)

Program Committee Member

1. Practice and Experience in Advanced Research Computing (PEARC) – 2022
2. ACM – Technical Symposium on Computer Science Education (SIGCSE) - Associate Program Chair 2021, 2022, 2023
3. ACM - Innovation and Technology in Computer Science Education (ITiCSE) 2021, 2022
4. International Conference on Sustainable Information Engineering and Technology (SIET) 2022
5. ACM - Consortium for Computing Sciences in Colleges — Northeastern Region 2019 (CCSNE) 2018, 2019, 2022
6. SPIE High-Performance Computing in Remote Sensing (RS12), Remote Sensing Europe Symposium, 2012, Edinburgh, United Kingdom
7. SPIE High-Performance Computing in Remote Sensing (RS 11), Remote Sensing Europe Symposium, 2011, Prague, Czech Republic
8. IEEE Long Island Systems Applications and Technology Conference (LISAT 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019), Farmingdale, NY, USA
9. IASTED Imaging and Signal Processing in Healthcare and Technology (ISPHT 2011, 2012), Washington DC, USA
10. IASTED International Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2008, 2009, 2010, 2011, 2013), Innsbruck, Austria
11. IASTED International Conference on Parallel and Distributed Computing and Networks, (PDCN 2009, 2010, 2013, 2014, 2016), Innsbruck, Austria
12. ACIS International Conference on Software Engineering Research, Management and Applications (SERA2009), Haiku, China
13. International Conference on Signal Processing and Multimedia Applications (SIGMAP 2009), Milan, Italy
14. IASTED International Conference on Visualization, Imaging and Image Processing, (VIIP 2006, 2007, 2008), Palma de Mallorca, Spain
15. IASTED International Conference on Signal and Image Processing (SIP 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013), Honolulu, HI
16. IASTED International Conference on Graphics and Visualization in Engineering, (GVE), Clearwater, FL, January 2007
17. IEEE Geosciences and Remote Sensing Symposium, (IGARSS), 2006, 2008
18. First ACIS International Workshop on E-Learning Technologies: Experiences and Challenges (ELTEC 06), Las Vegas, NV, June 2006
19. World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2006, 2007), Orlando, FL
20. International Symposium on Optics, Informatics and Cyber-Technologies (OIC 2006), Orlando, FL, July 2006

Organizer
1. Panel Discussion, “Mobile instructional laboratory environments and their use in computing sciences”, Cons for Comp Sci in Colleges, Eastern Conference, New Rochelle, NY, Oct 2007
2. Panel Discussion, “Undergraduate Research – Students’ Rewards and Challenges”, Cons for Comp Sci in Colleges, Eastern Conference, New Rochelle, NY, Oct 2005
3. Panel Discussion, “Considerations on Undergraduate Computer Science Research”, Cons for Comp Sci in Colleges, Northeastern Conference, Providence, RI, Apr 2005
4. Special Session on Advances in Hyperspectral Imagery Processing, *ASPRS Annual Conference*, Baltimore, MD, Mar 2005
5. Chair, SPIE sponsored workshop, “Imaging and Optics: Research and Education”, Montclair, NJ, Nov 2004.

Moderator
1. Session in Hyperspectral Imagery II Applications and Neural Networks, ASPRS Annual Conf, Tampa, FL, May 2007
2. Session in Hyperspectral Imagery II Applications and Neural Networks, ASPRS Annual Conf, Reno, NV, May 2006
3. Session in Hyperspectral Imagery Applications, ASPRS Annual Conf, Denver, CO, May 2004
4. Session in Neural Networks, ASPRS Annual Conf, Denver, CO, May 2004
5. Session in Unsupervised Feature Extraction, ASPRS Annual Conf, Anchorage, AK, May 2003

Discussion Leader / Scribe

1. NSF REU PI Meeting, Recruitment Working Group Leader, Austin, TX, February 28-29, 2008
2. NSF CISE CPATH Townhall Meeting, Focus Group Scribe, New Jersey Institute of Technology, Newark, NJ, December 1, 2006
3. McGraw Hill Computer Science I, Leader, Cohoon Davidson Focus Group, Key West FL, January 2004

Professional Reviews

Grants

National Science Foundation – 12 Panels – 2004, 2005, 2007, 2009, 2010, 2011, 2016, 2017, 2021, 2022 (including BigData, Career, Cyber- Enabled Discovery, IGMS, Midscale, MRI, and REU), site visits and adhoc reviews

Department of Energy Office of Advanced Scientific Computing Research (ASCR) 2021

NASA Postdoctoral Program (NPP) - 2012

Promotion and Tenure Reviewer

US University – Fall 2012

US University – Fall 2012

Scholarships

CMD-IT/ACM Richard Tapia Celebration of Diversity in Computing Conference Scholarships 2021, 2022

Journals

1. IEEE Transactions on Geosciences and Remote Sensing (15) 2003-present
2. IEEE Geosciences and Remote Sensing Letters (6) 2003-present
3. IEEE Transactions on Biomedical Engineering (2) 2003-present
4. IEEE Journal of Sel. Top. in App. Earth Observations and Remote Sensing (1) 2010-present
5. IEEE Transactions on Neural Networks (1) 2003-present
6. IEEE Journal of Sel. Top. In Signal Processing (1) 2014-present
7. IEEE Signal Processing Magazine (1) 2010-present
8. IEEE Access (1) 2022 - present
9. SPIE Optical Engineering (8) 2003-present
10. SPIE Journal of Applied Remote Sensing (3) 2007 – present
11. SPIE Journal of Medical Imaging (1) 2021 – present
12. SPIE Journal of Electronic Imaging (1) 2021 – present
13. Canadian Journal of Remote Sensing (3) 2003-present
14. International Journal of Remote Sensing (14) 2003-present
15. Photogrammetric Engineering and Remote Sensing (1) 2003-present
16. Journal of Real Time Image Processing (1) 2008-present
17. Journal of Information Fusion (2) 2008-present
18. Sensors (1) 2009 – present
19. Journal of Franklin Institute (1) 2010 – present
20. The Oxford Computer Journal (1) 2012-present
21. Information Systems Research (1) 2012-present
22. Journal of Next Generation Information Technology (1) 2014-present
23. International Journal of Electrical and Computer Engineering (IJECE) (1) 2021-present
24. Journal of Child and Family Studies (2) 2019-present
25. Journal of King Saud University - Computer and Information Sciences (1) 2021- present
26. International Journal of Production Research (1) 2021- present
27. Agronomy (1) 2021-present
28. ACM Computer Reviews 2006 - present

Conference

1. Eurographics Conference on Visualization, EuroVis 2013

2. The International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, VISAPP 2012
3. The 5th International Symposium on Bio- and Medical Informatics and Cybernetics: BMIC 2011, 2013
4. IEEE International Symposium on Signals, Circuits and Systems (ISSCS) 2007
5. ACM – Technical Symposium on Computer Science Education (SIGCSE) 2004-2016
6. ACM - Innovation and Technology in Computer Science Education (ITiCSE) 2005-13
7. Frontiers in Education Conference (FIE) 2005, 2006
8. Consortium for Computing Sciences in Colleges, Eastern Conference (CCSCE) 2005
9. Consortium for Computing Sciences in Colleges, North Eastern Conference (CCSCNE) 2005, 2006
10. World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI) 2004, 2005, 2006
11. 4Th WSEAS International Conference on Soft Computing, Computing, Optimization, Simulation and Manufacturing (SOSM), 2004
12. International Conference on Computing, Communications and Control Technologies: (CCCT), 2004
13. International Conference on Cybernetics and Information Technologies, Systems and Applications: (CITSA), 2004

Associate Memberships

Association for Computing Machinery (ACM)	2002 – present
The International Society for Optical Engineering (SPIE)	2001 – present
Institute of Electrical and Electronics Engineers (IEEE)	2002 – present
IEEE Geoscience and Remote Sensing Society (IEEE – GRSS)	2002 – present
IEEE Robotics and Automation Society (IEEE-RAS)	2021 - present
IBM Academic Initiative, Member	2005 – present
Educause, Basic Member	2006 – present
Antiphishing Working Group (APWG)	2006 – 2020
APWG Education Group	2006 – 2020
APWG Future Threats Model Group	2006 – 2020

Past Associate Memberships

IEEE Society for Social Implications of Technology (IEEE – SSIT)	2005 – 2006
IEEE Communications Society	2004 – 2005
IEEE Computer Society	2002 – 2004
American Society for Photogrammetry & Remote Sensing (ASPRS)	2000 – 2010
Consortium for Computing Sciences in Colleges (CCSC)	2003 – 2006, 2007 -09
McGraw Hill President's Club	2004 – 2008
American Numismatic Association (ANA)	2005–2006,2007-2008

Professional Enhancement Workshop and Seminar Participation

- Coaching Skills for Everyone, National Science Foundation Learn Academy, July 2020
- Introduction to Canvas – Online Workshop, Montclair State University, June 2014
- NSF CS-REU Meeting, Philadelphia, PA, March 16-17, 2013
- Empowering Online Teaching and Learning – Faculty Course, Montclair State University, Spring 2013
- Summer Institute on Online Teaching and Learning, Montclair State University, June 20-22, 2011
- NSF CS-REU Meetings, Charlotte, NC, March 17-19, 2010, Arlington, VA, March 28-29, 2009, Austin, TX, February 28-29, 2008, San Jose, CA, April 26-28, 2007
- NIH Funding and Grants Administration Seminar, John Jay College, City University of New York, New York, October 19, 2007
- NSF CISE CPATH Townhall Meeting, New Jersey Institute of Technology, Newark, NJ, December 1, 2006
- NSF Lego Mindstorms in Computer Science Education, Villanova University, Villanova, PA, August 10-14, 2006
- CRA Academic Careers & Effective Teaching Workshop, Washington, DC, February 27-28, 2006
- Richard Tapia Celebration of Diversity in Computing, Albuquerque, NM, October 19-22, 2005

- David Bauer and Assoc., Grant Writing Workshop, Montclair State University, Montclair, NJ, March 1, 2005
- NSF Pyro Robotics Workshop, Bryn Mawr College, Bryn Mawr, PA, August 3-5, 2004
- NSF Regional Grants Conference – Columbia University, New York, NY, March 15-16, 2004
- SBIR / STTR Regional Tour, Louisiana Technology Transfer Office, Baton Rouge, March 2003