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

robilas@montclair.eduMontclair State University(973) 655 42301, Normal Ave CCIS 327K
Montclair, NJ 0704https://www.montclair.edu/profilepages/view_profile.php?username=robilas

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), School of Computing 09/2003 – present (Assistant Professor 2003-2008, Associate Professor 2008-2012, Full 2012-present)

- Active researcher with \$5.7M (\$2.35M 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 90 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 60 graduate, 39 undergraduate, 5 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.
- 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.
- Campus Representative for the Barry Goldwater Scholarship, the most prominent federal undergraduate merit program for science students. Coordinated the first ever award at MSU in 2023.

Program Director (PD)-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 research. Diverse portfolio 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 receipt to review and recommendation) independently or as part of a group of PDs. 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 through PI meetings and professional conferences, and workshops (including PEARC, CASC Fall and Spring meetings, SC) and campus visits.
- Active participant in NSF and CISE working groups and committees on improving program management efficiency, panel, and reviewer diversity, cloud migration, NSF internal awards and holiday planning,
- Inter-agency 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 interagency 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 and 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, Apr 2011
- Association for Computing Machinery (ACM) Senior Member, Jan 2010
- Institute for Electrical and Electronics Engineers (IEEE) Senior Member, Nov 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), Oct 2005
- Faculty Scholarship Program, Montclair State University 2004 present
- Wilbur LePage Scholarship for Outstanding Doctoral Candidate in Engineering, Syracuse University, Syracuse, NY, Aug 2002
- Syracuse University Graduate Summer Fellowship, Syracuse, NY, Jun 2000 Jul 2000
- The Soros Foundation for an Open Society Travel Award, Iasi, Romania, Aug 1997
- Romanian Ministry of Education National Scholarship and Fellowship, Iasi, Romania, 1992 1997

GRANTS

External Funding

- 1. 2024-2026, "CC* Regional Networking: Connectivity through Regional Infrastructure for Scientific Partnerships, Innovation, and Education", Co-PI, National Science Foundation, Co-PI, \$851,076
- 2. 2024 "Deployment of Virtual Machines for Operating Systems Course", PI, *Google Cloud Teaching Credits Program*, cloud credits equivalent, \$4,350
- 3. 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
- 4. 2022-2024. "Montclair State University CS Education Hub (MSU CS Hub)", senior personnel, *NJ CS for All: Expanding Professional Learning Competitive*, \$333,335.
- 5. 2022-2024. "Montclair State University CS for Everyone Everywhere (MSU CSEE) Program", senior personnel, *NJ CS for All: Implementing the 2020 CS Student Learning Standards Competitive*, \$330,330.
- 6. 2018-2021. "Intergovernmental Personnel Act (IPA) Assignment, CISE / OAC", PI, National Science Foundation, \$701,202
- 7. 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
- 8. 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
- 9. 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
- 10. 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
- 11. 2011-2014. "Decision Support System (DSS) for IT Management", PI, PSE&G (Public Service Enterprise Group) Technology Demonstration Grant Program, PI, \$218,000
- 12. 2010-2014. "Montclair REU Site in Imaging and Computer Vision (iMagine)", PI, National Science Foundation, IIS-1004447, \$287,760
- 13. 2010-2013. "MRI-R2: CSAM Acquisition of Scientific Computing Capacity", senior personnel, *National Science Foundation*, DMS-0959461, \$129,000
- 14. 2009-2013. "MRI: Acquisition of a High-Performance Computer Cluster Supporting Computational Science Research and Learning", PI, *National Science Foundation*, CNS-0922644, \$190,010
- 15. 2007-2010. "Montclair REU Site in Imaging and Computer Vision (iMagine)", PI, National Science Foundation, IIS-0648814, \$260,000
- 16. 2006-2007. "MobilITy Using Tablet PCs in the IT", PI, Hewlett-Packard Tech. Grant U06TFH0014, \$70,000
- 17. 2006-2007. "A New Course in Pattern Discovery", PI, *The International Society for Optical Engineering (SPIE)* Educational Grants - \$2,500
- 18. 2005-2006. "Efficient Hyperspectral Image Processing", PI, Sun Microsystems Academic Excellence Grant Program T-US-697950-C- \$35,755

- 19. 2005-2006. "Promoting Optics and Imaging Through Outreach Activities", PI, *The International Society for Optical Engineering (SPIE) Educational Grants* \$2,000
- 20. 2005. "Participation to the SPIE's Imaging Science Symposium", PI, The International Society for Optical Engineering (SPIE) Technical Programs Committee \$465
- 21. 2004. "Participation to the SPIE's Defense and Security Symposium", PI, *The International Society for Optical Engineering (SPIE) Technical Programs Committee* \$415
- 22. 2004-2005. "Center for Optics and Imaging Education", PI, *The International Society for Optical Engineering* (SPIE) Educational Grants \$3,000
- 23. 2002. Society for Optical Engineering (SPIE) Student Travel Grant \$490

Internal Funding

- 1. 2023-2024. "Security and Privacy for Autonomous and Connected Vehicles", Co-PI, *Montclair State University*, Faculty research Mentoring Program \$8,000
- 2. 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
- 3. 2014-2015. "Social Network Data Integration for Cybersecurity", PI, *Montclair State University*, Separately Budgeted Research Program \$4,000
- 4. 2014-2015. "CUDA GPU and Efficient Processing of Remote Sensing Data", PI, *Montclair State University, CSAM Sokol Faculty / Student Research Program* \$2,000
- 5. 2012. "Participation in the IEEE ICALT 2012", PI, Montclair State University Global Ed. Grants \$800
- 6. 2009-2010. "Hyperspectral Image Acquisition System", PI, Montclair State University Grant Proposal Development Program \$2000
- 7. 2009. "Participation in the IEEE IGARSS 2009", PI, Montclair State University Global Ed. Grants \$800
- 8. 2007. "Participation in the IEEE IGARSS 2007", PI, Montclair State University Global Ed. Grants \$800
- 9. 2006-2007. "Efficient Use of RFID Technology for Equipment Tracking", PI, Montclair State University Student Faculty Research Projects \$1,500
- 10. 2006. "Participation in the ACM ITiCSE 2006", PI, Montclair State University Global Ed. Grants \$800
- 11. 2006-2007. "A Query System for Remote Sensing Data", PI, Montclair State University, CSAM Sokol Faculty / Student Research Program \$2,000
- 12. 2005. "Participation in the IEEE ISSCS 2005", PI, Montclair State University Global Ed. Grants \$800
- 13. 2005-2006. "Real Time Feature Extraction for Remote Sensing", PI, *Montclair State University Separately Budgeted Research* \$2,000
- 14. 2004-2005. "Hyperspectral Image Acquisition", PI, Montclair State University Student Faculty Research Projects \$2,000
- 15. 2004-2005. "Remote Sensing Data Processing in a Distributed Environment", PI, *Montclair State University Separately Budgeted Research* \$2,000
- 16. 2002-2003. "Employment of Multimedia and Internet in Teaching Computer Science", PI, University of New Orleans Faculty Initiative for Technology in Teaching \$3,250
- 17. 2001. Syracuse University Travel Grant \$500

Pending

- 24. 2025-2028 "SaTC: EDU: Enhancing Software Security and Sustainability Learning using Intelligent Tutoring and Software Patterns", Co-PI, *National Science Foundation*, \$399,793
- 25. 2024-2027 "MRI: Track 1 Acquisition of an Extended Reality Based Driving Simulator for User Centered Interdisciplinary Research and Education at Montclair State University", Co-PI, *National Science Foundation*, \$636,798
- 26. 2024-2029 "Collaborative Research: CITAP: Technology Translation Services to Democratize Advanced Cyberinfrastructure", PI, *National Science Foundation*, \$604,723

PUBLICATIONS AND PRESENTATIONS

Peer Reviewed Publications

denotes *undergraduate student, *graduate student, ^K-12 teacher

- 1. S. Ehiri⁺, S. A. Robila, "Sustainability for Estimating Global Energy Efficiency of Data Centers", *Proc. Proc IEEE Int. Conf. Electronics, Computers and Artificial Intelligence (ECAI 2024)*, pp.1-6, in press.
- K. G. Herbert, T. J. Marlowe, V. K. Anu, S. A. Robila, "K-12 Teachers and Data Science: Learning Interdisciplinary Science through Research Experiences", *Proceedings American Association of Engineering Education (ASEE)*, pp. 1-7, 2024.
- T. Samaras[^], T. J. Marlowe, K. G. Herbert, V. K. Anu, S. Hagiwara, and S. A. Robila, "Interdisciplinary Synergy: Resources for Embedding Plugged and Unplugged Computer and Data Science Activities into the K-12 Curriculum", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 97-100, 2024.
- 4. A. Brantley[^], K. G. Herbert, V. K. Anu, S. Hagiwara, S. A. Robila, Jason T.L. Wang, "Understanding Space Weather Through Storytelling Data Visualization", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 220-223, 2024.
- 5. E. Douglass[^], A. Cannella[^], K. G. Herbert, V. Anu, S. Hagiwara, T. Marlowe, S. A. Robila, "Design and Implementation of a STEAM Robotics Lesson on the Spotted Lanternfly: Engineering a Computer Science Solution", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 367-370, 2024.
- 6. M. M. S. Menichella[^], Stefan A. Robila and Katherine G. Herbert, Thomas Marlowe. "Creating a Cross, Curricular Resource for Solar Weather History and Its Impact on Daily Life", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 402-405, 2024.
- C. Drozdowski[^], T. J. Marlowe, K. G. Herbert, V. K. Anu, S. Hagiwara, S. A. Robila, "The APP Method: Self-Regulation Strategies Giving POWER to Computer Science Students", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 412-415, 2024..
- 8. S. Emeghara[^], S. Hagiwara, S. A. Robila, K. G. Herbert, T. Marlowe, V. K. Anu. "A Cyber-Physical Systems Approach to Teaching Solar Weather Topics in Middle School", *Proceedings IEEE Integrated STEM Education Conference (ISEC)*, pp. 495-498, 2024.
- 9. I. Cumberbatch, J. Olatunji^{*}, S.A. Robila "Using Extended Reality Technology in Science Education", *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2023.
- 10. A. Moctezuma^{*}, S.A. Robila, "A Framework for Evaluating Parental Controls for Streaming Services", *Proc. IEEE Integrated STEM Education Conference (ISEC)*, pp. 199-203, 2023.
- 11. I. Cumberbatch, S. A. Robila, "An extended reality environment for urban area environmental data analysis", *Proc. SPIE Geospatial Informatics XIII*, vol. 12525, pp. 203-211, 2023
- 12. A. Saxena⁺, S.A. Robila "Automated machine learning for analysis and prediction of vehicle crashes", *International Journal of Informatics and Communication Technology*, vol 12, No. 1, pp. 46-53, 2023
- 13. J. Gallino⁺, S. A. Robila, "HyperGiX A User Friendly Open-source Hyperspectral Imagery Application", *Proc. IEEE IGARSS*, pp. 4019-4022, 2022
- 14. E. Zharri⁺, S.A. Robila "Shiny Dashboard NYC Trees Benefit Estimation", *Proc. IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-6, 2022
- 15. S. Vollmin⁺, S.A. Robila "A Machine Learning Utility for Detection of Potential Protected Health Information Images", *Proc. IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp. 1-7, 2022
- 16. R. DePascale⁺, S.A. Robila "A Semantic Text Processing System for Free-Write English Papers", *Proc.IEEE Integrated STEM Education Conference (ISEC)*, pp. 1-8, 2022
- 17. A. Saxena⁺, S.A. Robila "Analysis of the New York City's Vehicle Crash Open Data", *Proc. IEEE International Conference on Big Data (Big Data)*, pp. 1-3, 2021
- 18. 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.
- 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
- 20. 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.

- 21. 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
- 22. 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
- 23. 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
- 24. 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
- 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
- P. Persaud^{*}, A. Varde, S.A. Robila, "Enhancing Autonomous Vehicles with Commonsense: Smart Mobility in Smart Cities", *Proceedings IEEE ICTAI*, 1-5, 2017
- 27. 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
- 28. 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
- 29. 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
- 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
- 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
- 32. 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
- 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
- 34. 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
- 35. 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
- 36. 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
- 37. S. A. Robila, "Introducing Green Computing to General Education" Proceedings of Society for Information Technology & Teacher Education Int. Conference (SITE), pp. 78-83, 2013.
- 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
- 39. 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
- 40. 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.
- 41. 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.
- 42. 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
- 43. 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
- 44. S. A. Robila, G. Busardo⁺, "Hyperspectral Data Processing in a High Performance Computing Environment" *in Proceedings IEEE PDSEC IPDPS*, 2011, pp. 1424-1431, 2011

- 45. 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
- 46. 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
- 47. S. A. Robila, "Considerations on Unsupervised Spectral Data Unmixing and Complexity Pursuit", *Proceedings IEEE IGARSS*, pp. 987 – 990, 2010
- 48. S. A. Robila, M. Butler⁺, "Parallel Unmixing of Hyperspectral Data Using Complexity Pursuit", *Proceedings IEEE IGARSS*, pp. 1035-1038, 2010
- 49. 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
- 50. 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
- 51. B. Kaipa⁺, S.A. Robila, "Statistical Steganalyis of Images Using Open-Source Software " *Proceedings IEEE LISAT 2010*, pp.1-5, 2010
- 52. S. A. Robila, "Band reduction for hyperspectral imagery processing," in Proceedings SPIE Computational Imaging VIII, vol. 7533, pp. 75330W-9, 2010
- 53. S. A. Robila, "Spectral Image Processing Using Sparse Linear Transforms", *Proceedings IEEE IGARSS*, pp. IV-534-7, 2009
- 54. S.A. Robila, "Quo vadis face recognition: Spectral considerations," *Proceedings IEEE Long Island Systems, Applications and Technology Conference (LISAT)*, pp.1-5, 2009
- 55. 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
- 56. 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
- 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
- 58. 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
- 59. 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
- 60. 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
- 61. S. A. Robila, "Toward hyperspectral face recognition," in Proceedings SPIE Image Processing: Algorithms and Systems VI, vol. 6812, pp. 68120X-9, 2008
- 62. 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
- 63. 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
- 64. J. Peng, S. A. Robila, "Weighted Additive Criteria for Linear Dimension Reduction", *Proceedings IEEE ICDM*, pp.619-624, 2007
- 65. S. A. Robila, "Information Disclosure Incidents and Computer Security Education", *Proceedings ASEE MidAtlantic Conference*, 7 pgs on CD, 2007
- 66. 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
- 67. 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

- 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
- 69. S. A. Robila, "A Class of Detection Filters for Targets and Anomalies in Multispectral / Hyperspectral Imagery", *Proceedings IEEE CVPR*, 132-140, 2006
- S. A. Robila, "Use of Remote Sensing Applications and its Implications to the Society", Proceedings IEEE ISTAS, 1-6, 2006
- 71. J. Ragucci^{*}, S. A. Robila, "Social Aspects of Phishing", *Proceedings IEEE ISTAS*, 1-5, DOI: 10.1109/ISTAS.2006.43758935, 2006
- 72. 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
- 73. S. A. Robila, J. Ragucci^{*}, "Don't be a Phish: Steps in User Education", *Proceedings ITiCSE*, 237-241, 2006.
- S. A. Robila, "Real Time Processing of Hyperspectral Images", Proceedings ASPRS Annual Conference, 5 pgs. on CD, 2006
- 75. 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
- 76. S. A. Robila, "Using Spectral Distances for Speedup in Hyperspectral Image Processing", *International Journal* of *Remote Sensing*, vol 26, no. 24, 5629-5650, 2005
- 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
- 78. S. A. Robila, C. Bredlau, "Writing Requirements in Computer Security", in Proceedings ACM SIGITE, 385-386, 2005
- 79. S. A. Robila, "Distributed Computing and Computer Security Education", *in Proceedings ACM SIGITE*, 383-384, 2005
- 80. S. A. Robila, A. Gershman^{*}, "Spectral Matching Accuracy in Processing Hyperspectral Data", *in Proceedings IEEE ISSCS*, 163-166, 2005
- 81. S. A. Robila, "Interdisciplinary Undergraduate Research with Focus on Hyperspectral / Multispectral Imagery", ASEE Mid-Atlantic Conference, 11 pgs. on CD, 2005
- 82. S. A. Robila, "An Investigation of Spectral Metrics in Hyperspectral Image Preprocessing for Classification", *Proceedings ASPRS Annual Conference*, 9 pgs., 2005
- 83. 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
- 84. S. A. Robila, "An Analysis of Spectral Metrics for Hyperspectral Image Processing", *IEEE Geoscience and Remote Sensing Symposium, IGARSS*, vol. 5, 3233-3236, 2004
- 85. S. A. Robila, "Distributed Processing of Hyperspectral Images", *Proceedings ASPRS Annual Conference*, Denver, CO, 4 pgs. on CD, 2004
- 86. 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
- 87. S. A. Robila, "Higher Order Statistics Based Feature Extraction for Hyperspectral Images", *Proceedings ASPRS Annual Conference*, 1 pg. on CD, 2003
- 88. S. A. Robila, "Investigation of Spectral Screening Techniques for Hyperspectral Image Processing", *Proceedings ASPRS Annual Conference*, 1 pg. on CD, 2003
- 89. 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
- 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
- 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

- 92. 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
- 93. 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
- 94. 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
- 95. 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.
- 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, antikeylogger.org, posted by invitation.

Professional Peer Reviewed Presentations / Abstracts

- 1. T. Samaras, T. J. Marlowe, K. G. Herbert, V. K. Anu, S. Hagiwara; S. A. Robila, "Interdisciplinary Synergy: Resources for Embedding Plugged and Unplugged Computer and Data Science Activities into the K-12 Curriculum". *Int. Society for Technology in Education (ISTE) EdTech Conference*, Denver CO, Jun 2024.
- 2. M. Robila, S.A. Robila, "Artificial Intelligence Methodologies in Examining Human Development and Family Functioning". *American Psychological Association Convention*, virtual, August 2020.
- 3. M. Robila, S.A. Robila, "Using Artificial Intelligence and Machine Learning in Supporting Families in an International Context". *Annual Conf. of the National Council on Family Relations*, Fort Worth, TX, Nov 2019.
- 4. 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, Jun 2019
- 5. 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, Mar 2016
- 6. S. A. Robila, "Feature extraction for remote sensing data using massive parallel processors". *World Weather Open Science Conference*, Montreal, QC, Aug 2014
- 7. S. A. Robila, "Computational Sensing Laboratory: Research and Education in Large Data Sets". *New Jersey Big Data Alliance Symposium*, Piscataway, NJ, Apr 2014
- 8. S. A. Robila, "Analysis of Industrial Visits as Component of Undergraduate Research Activities", *Council on Undergraduate Research Annual Conference*, Ewing, NJ, Jun 2012
- 9. K. Herbert, J. Fails, E. Hill, M. Oudshoorn, S. A. Robila, "Research Transcending Historic Disciplinary Boundaries", *Council on Undergraduate Research Annual Conference*, Ewing, NJ, Jun 2012

- 10. S. A. Robila, "Linear Sparse Feature Extraction Transforms for Remote Sensing Images", ASPRS Annual Conference, Portland, OR, May 2008
- 11. S. A. Robila, M. D. Islam^{*}, "HYPDB A Query System for Remote Sensing Data", *ASPRS Annual Conference*, Portland, OR, May 2008
- 12. M. Robila, S. A. Robila, "Developing an Interdisciplinary Partnership in Using Technology in Teaching", *Teaching in Higher Education Forum (THE 2003)*, Baton Rouge, LA, Apr 2003
- 13. S. A. Robila, P. K. Varshney, S. Taylor, "Feature Extraction for Hyperspectral Images Using Independent Component Analysis", *Fifth Int. Airborne Remote Sensing Conf. 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 (<u>www.reviews.com</u>)

- 1. S. A. Robila, Book review of Compressed sensing for distributed systems, Coluccia G., Ravazzi C., Magli E., Springer, 2015, Sep 2015
- 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.
- 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
- 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
- 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 Dept. of Computer Science", CSAM Newsletter, Fall 2004, pp. 8

Invited Presentations

Outside Home Institution

- 1. S. A. Robila, " Computers and the Environment From Energy Efficiency to Software Sustainability", *Keynote Lecture, IEEE Int. Conf. Electronics, Computers and Artificial Intelligence ECAI*, Iasi, Romania, Jun 2024
- 2. S. A. Robila, "Project Description and NSF Merit Review Criteria", ASEE Capacity Building for Research at Minority-Serving Institutions: Proposal Development Workshop (CyBR-MSI: PDW), virtual, Dec 2, 2022

- 3. S. A. Robila, "Seeking Sustainability for Computing", *ADP Environmental Business Resource Group*, Roseland NJ / virtual, Apr 27, 2022
- 4. S.A. Robila, "Considerations of Computing Sustainability", IEX Trading, New York, NY / virtual, Dec 8 2021
- 5. S. A. Robila, "Project Description and NSF Merit Review Criteria", ASEE Capacity Building for Research at Minority-Serving Institutions: Proposal Development Workshop (CyBR-MSI: PDW), virtual, Dec 3, 2021
- 6. S.A. Robila, "Pathway through Computational Science: Research, Service and Administration", *National Science Foundation*, Alexandria, VA, May 24, 2021
- 7. S.A. Robila, "Research and Education in Computational Sensing and High Performance Computing", *National Science Foundation*, Arlington, VA, May 18, 2017
- 8. S. A. Robila, "Research and Education Steps towards Green Computing", *Department of Electrical Engineering, Kasetkasert University*, Thailand, July 8, 2016
- 9. 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
- 10. S. A. Robila, "Pattern Recognition for Spectral Imaging", *Pattern Analysis and Machine Learning Group, Oxford University*, Oxford, United Kingdom, January 17, 2011
- 11. S. A. Robila, "Efficient Use of Hyperspectral Imagery", Center for Image Analysis Seminar Series, Uppsala University, Uppsala, Sweden, October 25, 2010
- 12. 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
- 13. S. A. Robila, "Assessing REU programs Common Application", panelist, *National Science Foundation REU PI meeting*, Charlotte, NC, March 2010
- 14. S. A. Robila, "2009 iMagine REU in Imaging and Computer Vision", Poster, *National Science Foundation REU PI meeting*, Charlotte, NC, March 2010
- 15. S. A. Robila, "2008 iMagine REU in Imaging and Computer Vision", Poster, *National Science Foundation REU PI meeting*, Arlington, VA, March 2009
- 16. S. A. Robila, "Hyperspectral Image Processing", *Department of Computer Science Colloquium Series, Rowan University,* Glassborough, NJ, December 10, 2008
- 17. S. A. Robila, "Efficient Hyperspectral Data Feature Extraction", Armament Research, *Development and Engineering Center (ARDEC)*, Picatinny, NJ, November 10, 2008
- 18. 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
- 19. S. A. Robila, "Recruitment Strategies for REU Sites: Report of the Working Group", *NSF REU PI Meeting*, Poster, Austin, TX, February 29, 2008.
- 20. 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.
- 21. S. A. Robila, "Recent Development in Multispectral / Hyperspectral Image Processing", *Math. And Comp. Sci. Colloquia Series*, North Carolina Central University, NC, April 2005
- 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
- 23. M. Chopping, S. A. Robila, "Remote Sensing at Montclair State University", *New Jersey Technology Council,* Oral Presentation, Montclair State University, Montclair, NJ, April 2004
- 24. 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
- 25. S. A. Robila, "Digital Image Processing Spatial Operations", *Comp. Sci. Dept. Colloquia Series*, University of Nebraska at Kearney, NE, February 2002
- 26. 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

At Home Institution

- 1. S.A. Robila, T. White, "The Barry Goldwater and Fulbright Scholarships Merit Based Programs for Undergraduate Students", MSU Student Research Symposium, invited presentation, MSU, Apr 26, 2024
- 2. S.A. Robila, K. Handelli, "AI in Computer Science Panel", Fridays with ITDS, panelist, MSU, Feb 2024
- 3. S.A. Robila, "Information Session on the NSF Major Research Instrumentation Competition", PI panelist, MSU, May 24, 2023
- 4. S. A. Robila, "The Arms Race in Cybersecurity", Webinar, Dept. of Computer Science REU Site, MSU, June 8, 2022
- 5. S. A. Robila, "Bridging the Human Technology Divide through Computation and Sensing", Presentation, part of the Red Hawks and Robots: On the Cutting Edge of Technology Robotics Showcase, April 20, 2022
- 6. S. A. Robila, "The Arms Race in Cybersecurity", Webinar, Dept. of Computer Science REU Site, MSU, June 9, 2021
- 7. O. 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
- 8. S. A. Robila, "NSF Process and Opportunities", Webinar, Dept. of Computer Science, MSU, Mar 31, 2021
- 9. S. A. Robila, "Computer Science", Major Madness: Exploring STEM Series, MSU, Mar 15, 2021
- 10. S. A. Robila, "Seeking Sustainability for Computing", Sustainability Seminar Series, MSU, Mar 15, 2021

- 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
- 12. S. A. Robila, "Computational Sensing and Applications", LSAMP Student Meeting, MSU, Mar 27, 2014
- 13. S. A. Robila, "Computational Sensing and Applications", Computer Club, Oral Presentation, MSU, Apr 2, 2014
- 14. S. A. Robila, "Hyperspectral Imagery and Applications", Physics Club, Oral Presentation, MSU, Apr 14, 2010
- 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.
- 16. S. A. Robila, "Seeing the Unseen: Spectral Imaging Reveals Secrets", *GK-12 Math and Science Day*, MSU, June 9, 2009
- 17. S. A. Robila, "Seeing the Unseen: Spectral Imaging", Weston Scholars Open House, MSU, May 2009
- 18. S. A. Robila, "Processing Beyond the Visible Imagery", *College of Sciences and Mathematics Graduate Showcase*, MSU, Apr 10, 2007.
- 19. S. A. Robila, "Lessons Learned in the Grant Application Process", *MSU Grant Success Stories Workshop*, MSU, Mar 28, 2007
- 20. S. A. Robila, "Seeing the Unseen Hyperspectral Image Processing and Computers Science", College of Sciences and Mathematics Open House, MSU, Feb 2004
- 21. S. A. Robila, "Hyperspectral Image Processing", College of Sciences and Mathematics Meeting, MSU, Oct 2003
- 22. S. A. Robila, C. Shah, T. Achalakul, P. Varshney, "Hyperspectral/Multispectral Imagery Applications", *Kodak Technology Meeting*, Syracuse University, Nov 2001
- 23. S. A. Robila, "Real Time Multispectral Image Processing Technologies", *Kodak Technology. Meeting*, Syracuse University, Nov 2001
- 24. S. A. Robila, J. Lee, "Hyperspectral Image Processing", Syracuse University Open House, Apr 2001
- 25. S. Taylor, S. A. Robila, "Real Time Multispectral Image Processing", *Office for Government Relations*, Syracuse University, Nov 2000

Course Guest Lectures

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

Workshops / Tutorials

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

PROFESSIONAL DEVELOPMENT

•	IEEE Geoscience and Remote Sensing	Image Analysis and Data Fusion School, Computer Vision for Earth Observation, Oct 2022
•	Harvard Institutes for Higher Education	Aligning Strategic Priorities with Financial Resources in Higher Education (SPFR), Jan 2022
٠	Franklin Covey	Leading at the Speed of Trust Course, Dec 2020
•	American Management Association	Comprehensive Project Management Course, Sep 2020
٠	Montclair State University	Certificate for Teaching Online and Hybrid, Jul 2014
٠	Computing Research Association	Leadership in Science Policy Institute (LiSPI), Apr 2013

TEACHING				
<u>TEACHING</u> Montclair State University				
•	d abova)			
(graduate courses are numbered 500 and above) Intro to Computer Applications CMPT 109 Fall 2004 - 2006, 2009, 2012, 2013				
Fluency with IT	CIVIT I 109	Spring 2006, 2007, Summer 2009		
Computational Concepts	CSIT 104			
	CSIT 104 CSIT 110	Fall 2014, 2015, 2021, 2022, 2023, Spring 2016, 2017		
Computer Concepts for IT		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, Summer 2023, 2024		
	CMPT 583	Spring 2006, 2008		
	CSIT 547	Spring 2021, 2022, 2023, 2024, Fall 2023, Summer 2022		
Foundations of Programming	CMPT 484	Fall 2013		
Languages	CSIT 313	Fall 2014, 2022, 2023, Spring 2022, 2023, 2024		
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		
	CSIT 491	Spring 2023, 2024		
University of New Orleans				
(graduate courses are numbered 6000 a				
Data Encryption / Cryptography	CSCI 6130	Fall 2002		
Pattern Recognition	CSCI 6990	Spring 2003		
Syracuse University				
(graduate courses are numbered 500 and	d 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 (TA)	22C017	Fall 1997		
	22C117	Fall 1997		
Stefan A. Robila		15		
		1.)		

SERVICE

University-based Montclair State University University level Undergraduate Res Prog Steering Committee Jan 2023 – Dec 2023 National Prestigious Scholarships Committee Jan 2021 - present Barry Goldwater Scholarship Campus Rep Mar 2021 – present Coordinated the first ever Barry Goldwater award at MSU (2023) Institute for Sustainability Studies, Faculty Jan 2010 - May 2018 Steering Committee Jan 2010 - May 2018 Sep 2003 - May 2016 Science Informatics Program, Faculty Passaic River Institute, Faculty Jan 2004 - May 2018 Jan 2013 - May 2018 Patent Review Committee Lab. Rob. Interest Group, Org Comm. mem. Apr 2015 - May 2018 Reviewer, Student Research Symposium Feb 2014 GreenIT Technical Action Comm., Chair Aug 2009 - May2010 Career Development Committee, alternate Jul 2011 – Jun 2013, Jul 2015 – Jun 2016 Feb 2004 - Sep 2005 member chair Mar 2005 - Mar 2006 Jul 2013 – Jun 2014, Jul 2022 – Jun 2023 Sabbatical Review Committee, member Jul 2008 – Jun 2009, Jul 2011 – Jun 2012, alternate Jul 2017 – Jun 2016, Jul 2021 – Jun 2022 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 Ouad Committee Jan 2014 - May 2014 School of the Environment Jan 2014 - May 2014 Sept 2009 - Aug 2010 Distinguished Teacher Comm. Tec Supp Spec Search Comm (CORE) July 2008 - Aug 2008 Associate Dean Search Committee Aug 2007 - Aug 2008, Aug 2008 - Dec 2008 Oct 2007 - May 2008 Annual Student Conference Committee Computer Modeling Group, Faculty Apr 2004 - Aug 2007 Department level Department Liaison for Library May 2021 – present Sabbatical Committee, member Mar 2021 – Jun 2023 Mar 2021 – Jun 2022 Scheduling Committee, member Personnel Action Committee, member Sep 2014 - May 2017 chair Sep 2022 – Jun 2023 Sep 2014 - May 2018 Curriculum Committee, member Advisor, undergraduate majors Sep 2004 - present Graduate Committee, member May 2017 - Mar 2021, Sep 2012 - June 2014 Chair Search Committee, member Sep 2012 - Dec 2012, Jan 2013 - May 2013 Faculty Search Committee, member Sep 2011 - May 2012, Sep 2023 - May 2024 Sep 2009 - May 2010 Chair

Steering Committee, member Chair Doctoral Program Committee Relocation Committee Brochure Committee, chair Enrollment Committee Logo Committee, chair Subcommittee on CS 1 Hardware Courses Committee Coordinator, CCSCE Conference student programming teams	Dec 2006 - June 2014 Dec 2006 - July 2012, Dec 2014 - May 2016 Apr 2004 - Jan 2018 Apr 2004 - Aug 2006 Jan 2005 - Aug 2005 Sep 2003 - Dec 2005 Apr 2004 - Mar 2003 Mar 2004 - May 2004 Feb 2004 - Mar 2004 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	A 2004 D 2010		
The Council of Advisors, GLG	Aug 2004 - Dec 2019		
GLG Education	May 2007 - Dec 2019		
Advanced Placement Computer Science	M 2007		
Certified Reviewer, EPIC	May 2007		
Exam Reader, ETS	June 2007		
ACM Computing Reviews, Reviewer	Mar 2006 - present		
Student Poster Contest Judge, CCSCNE	April 2005		
Conference, Providence, RI			
Federal Trade Commission / Anti-Phishing Working			
Group Consumer Education Campaign Committee	Arr. 2007 Mar. 2018		
Member	Aug 2007 - May 2018		
IEEE Mentor Program, Mentor	Apr 2005 - Apr 2021		
NY, May 2023 Technical Program Committee Vice Chair	nd Technology Conference (LISAT 2023), Old Westbury, nd Technology Conference (LISAT 2022), Old Westbury,		
IEEE 2024 Long Island Systems Applications an NY, November 2024	nd Technology Conference (LISAT 2024), Old Westbury,		
2006, 2007, 2008, 2009, 2010	nology Conference (LISAT 2010), Farmingdale, NY, May		
 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 			

Program Committee Member

- 1. Practice and Experience in Advanced Research Computing (PEARC) 2022, 2023
- ACM Technical Symposium on Computer Science Education (SIGCSE) Senior Member 2021, 2022, 2023
- 3. ACM Innovation and Technology in Computer Science Education (ITiCSE) 2021, 2022, Senior Member 2023, 2024
- 4. International Conference on Sustainable Information Engineering and Technology (SIET) 2022
- 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
- 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
- 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, NJIT, 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 – 18 Panels – 2004, 2005, 2007, 2009, 2010, 2011, 2016, 2017, 2021, 2022, 2023, 2024 (including BigData, Career, CSSI, Cyber-Enabled Discovery, CyberTraining, IGMS, Midscale, MRI, RET, REU, SCH), site visits and ad hoc reviews

Department of Energy Office of Advanced Scientific Computing Research (ASCR) 2021, 2022

NASA Postdoctoral Program (NPP) - 2012

Promotion and Tenure Reviewer

US University - Fall 2012, US University - Fall 2012, US University - Fall 2023

Scholarships

Richard Tapia Celebration of Diversity in Computing Conference Scholarships 2021, 2022, 2024 Barry Goldwater Scholarship

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. International Conference on Computer, Electrical & Communication Engineering-ICCECE 2023

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

Outreach

<u>Events</u>

HawkHacks Hackathon – Hunter College High School, Judge (May 2022, May 2023), Mentor (May 2024). <u>Talks</u>

- 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

Associate Memberships Association for Computing Machinery (ACM) Institute of Electrical and Electronics Engineers (IEEE) IEEE Geoscience and Remote Sensing Society (IEEE – GRSS) Educause, Basic Member	2002 – present 2002 – present 2002 – present 2006 – present
Past Associate MembershipsThe International Society for Optical Engineering (SPIE)Antiphishing Working Group (APWG)APWG Education GroupAPWG Future Threats Model GroupIBM Academic Initiative, MemberIEEE Robotics and Automation Society (IEEE-RAS)IEEE Society for Social Implications of Technology (IEEE – SSIT)IEEE Communications SocietyIEEE Computer SocietyAmerican Society for Photogrammetry & Remote Sensing (ASPRS)Consortium for Computing Sciences in Colleges (CCSC)McGraw Hill President's ClubAmerican Numismatic Association (ANA)	$\begin{array}{l} 2001-2020\\ 2006-2020\\ 2006-2020\\ 2006-2020\\ 2005-2018\\ 2021-2022\\ 2005-2006\\ 2004-2005\\ 2002-2004\\ 2000-2010\\ 2003-2006, 2007-09\\ 2004-2008\\ 2005-2006, 2007-2008\\ \end{array}$

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 Admin Seminar, John Jay Coll, CUNY 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 Comp Sci 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

STUDENT RESEARCH AND MENTORING

M.S. Theses / Projects

	<u>5. Theses / Flojects</u>		
1.	Smita Kumari	Fake News Detection Using NLP	May 2024
2.	Haripriya Retneni	E-commerce Using Sentiment Analysis	May 2024
3.	Dharani Dodda	Data Analysis and Interactive Data Exploration	May 2024
		of NYC Restaurant Inspection Results	
4.	Scott Ehiri	Energy Efficiency in Data Centers	Dec 2023
5.	Sai Ganganaboina	Replication and Division of Data in Cloud for Security	Dec 2023
6.	Sanjay Gopal	Weather Dashboard API using MuleSoft	Dec 2023
7.	Rohith Kunjappan	From Data to Decisions: Vis. of Air Quality Strategies	Dec 2023
8.	Yash Bulsara	An Analysis of US Airline Delay and Cancellation Data	Dec 2023
9.	Gill Kakulla	Global Influenza Virological Surveillance Exploratory	Dec 2023
		Data Analysis and Data Vis.	
10.	Rohith Shiripereddy	/Global Environment Insights: Analyzing Weather,	Dec 2023
		Energy, and Air Quality Trends	
11.	Ram Meka	Detection of DDOS Attacks in SDNs using ML	Dec 2023
12.	Parthsinh Desai	Vis. on Covid-19 Vaccines Administration	May 2023
13.	Maquay Richmond	Processing Large Image Coll with Python and HPC	May 2023
14.	Reeya Patel	Investigation of Human Errors and their	May 2023
		Contr to Cybersec. Threats: A Meta Analysis	
15.	Pritesh Ponnaboina	Data Analysis and Visualization of Open Data Sets	Dec 2022
16.	Anthony DeVito	SW for Querying and Visualizing NYC	Dec 2022
		TLC Taxi and For-Hire Vehicle Trip Data	
17.	Abhay Kumar	Exploration of Security Vuln.: A Meta Analysis	Oct 2022
18.	Francisco Orejarena	Optical Character Recognition of Maya Glyphs	May 2022
19.	Reginald Georges	NYC Taxi Trip Analysis	May 2022
20.	Hem Raval	Botnet attacks and detection tools analysis	May 2022
21.	Ryan DePascale	Semantic Text Processing System For Free-Write	Dec 2021
		English Papers	
22.	John Gallino	HyperGix: A Hyperspectral Data Application	Dec 2021
23.	Abhishek Saxena	NYC's Vehicle Crash Analysis and Prediction Tool	Dec 2021
24.	Nigel Mason	A System for Nutrition Monitoring for Schools	May 2021
25.	Obinna Ezeadum	Investigation of IoT Security Exploits	May 2021
26.	Andleeb Chaudhri	Exploratory Analysis of Airbnb and Los Angeles	May 2020
		Housing Characteristics	-
27.	Michael Perez	Interf. for Querying and data analysis of MLB stats	Dec 2019
28.	Scott Vollmin	Network Scanning Utility for the Detection of PHI and	May 2019
			-

20 Elana Zhani	Patient Inf. a Medical Enterprise Environment	Mary 2010
29. Elona Zhari	Data Mining and Visualization of Big Data	May 2019
30. Thomas Sullivan	Miniaturizing SCADA Testing for Enterprising Professionals	Mar 2019
31. Zahid Aziz	Interface for Querying and Data Mining For NYC Yellow and Green Taxi Trip Data	Dec 2018
32. Priyanka Phapale33. Inga Bondarenko	Visualizing Weather Financial Impact on Industries and Weather Derivatives	May 2018
34. Maitr. Kantessaria	HAWK-HYP Implementation and Testing of Distributed Algorithms for Hyperspectral Data on a Computer Cluster	May 2018
35. Jinfeng Ning	Interface for Querying and Data Processing For the Ratings and Data Processing Dataset	Dec 2017
36. Kevin Handeli	Departmental Repository for MS Projects	Dec 2017
37. Adam Schwartz	Implementation and Testing of a High Count Point Application on a Distributed System	May 2017
38. Moinul Sikder	Real Time Database Replication	May 2017
39. Senth. Rajendran	Secured Data Encryption Application for Various File Formats Using Public Images	Feb 2017
40. Greg Giannuario	Internet of Things and Smart Home Security - Security Analysis and Exploitation	Feb 2017
41. Krishna Gurum	Big Data Analytics on Stocks Prediction	Dec 2016
42. Samip Shah	"Noter" A Live Feed Web Application Built Using Mean Stack	Dec 2016
43. Bryan Passione	Digital Piracy, Technology and the Legal System	Dec 2016
44. Laura Morales	Data Mining for Education Assessment	Dec 2016
45. Benjamin Colsey	Nutritional Data for Meal Selection	May 2016
46. Enis Bilgin	Road Sign Recognition using Raspberry Pi	Dec 2015
47. Martin Butler	Interface for Querying Data from the IMDb Dataset	May 2015
48. Nirajan Thapa	Android App for Scribbler Robot	May 2015
49. Kale Evans	Effective Visualization of Hyperspectral Images on a Mobile RGB Display	May 2015
50. Pritesh Parekh	Face Recognition with Android Device	May 2015
51. Daniel Ricart	A HPC Approach to Nonnegative Matrix Factorization for Hyperspectral Data	Dec 2012
52. Gerald Busardo	Benchmarking clusters and Parallel Applications for Hyperspectral Data	Dec 2010
53. Shubhra Mittal	Scientific Repository System	May 2010
54. George Senger	G3Crypt – A Personal Encryption Tool	May 2009
55. Bhargavi Kaipa	Machine Learning in Steganalysis	May 2009
56. Kalpana Pal	Real Time Face Recognition Using Eigenfaces	Dec 2008
57. Juan Sandoval	DAS – Daycare Administration System	May 2008
58. Nick Senedzuk	Harvesting the Power of Grid Computing	May 2007
59. Lukasz Maciak	Nonlinear Matrix Factorization and Hyperspectral Imagery	May 2007
60. Shilpa Venugopal	Interactive Survey Development Kit (ISDK) (Outstanding Computer Science Graduate 2006)	Apr 2006
Graduate Thesis Comm	<u>nittees</u>	
Ph.D. Committee		
Darko Radakovic	An integrated CANAPANI and deep learning-based approach for mapping tall shrubs in Arctic tundra.	in progress

	Dept of EAES, (M Chopping advisor)		
Khalid Alobaid	Interpretable Machine Learning for Space Weather Analytics, Dept of CS, NJIT, (J. T. L. Wang advisor)	April 2024	
Faith Justus	An integrated approach to assessing spread of commercial horticulture and related environmental impa		
Giovanni Vincenti	Watershed: Cases in Central highlands of Kenya, Dept o EAES, (D. Yu advisor) Fuzzy Mediation as an Improved Method Towards Machine Learning and Information Fusion, Depart of CIS, Towson Univ, MD (G. Trajkovski adviso	May 2007	
		-)	
<i>Ph.D. Thesis Examiner</i> Deepti Yadav	Approaches for detection and identification of	March 2017	
Deepti Tadav	targets using remote sensing data		
N. Prabhu	Dept of Civil Eng, IIT Roorkee, India (M. Arora advisor Study of some information extraction techniques for hyperspectral imaging Dept of Civil Eng, IIT Roorkee, India (M. Arora advisor	Jan 2015	
	Dept of ertil Eng, iff Roorkee, man (in: mora advisor)	
M.S. Committees		D 2016	
Nishok Narasimha	Distr. Network Resource Manager – NetUNIX (C. Coutras advisor)	Dec 2016	
Gabrielle Redgate	HIPERLAN Simulation for Research and Ed.	Dec 2015	
-	(C. Coutras advisor)		
Salman Sidiqui Sparse	Representations for Hyperspectral Data (J. Peng advisor)	May 2008	
Marinos Michael	Multiorder Multidimensional Systems	May 2006	
	Comp. of the Transfer Function Using the DFT (G. Antoniou advisor)	j	
Graduate Independent	Studies		
Cristina Munoz	Dis. in New Soc Media Platforms: Challenges and Apps	. Dec 2023	
Omar Alkhalili	Fake News and the Impact on US Election Cycles"	Dec 2020	
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	
GS LSAMP PRELS So	<u>cholar</u>		
Iman Cumbarbatch	An XR Env. for Urban Area Env. Data Analysis	May 2023	
Undergraduate Independent Studies and Projects GS LSAMP (NSF LSAMP) Scholars			
Oluwakemi Akanle	VR Tools for Visualization of Land Management	May 2024	
Lohatt Manna	Sentiment Analysis from Image Data	Dec 2023	
James Olatunji	VR as a Tool for Research and Education	May 2023	
Amanda Moctezuma	Video Streaming Parental Controls	Dec 2022	
Anthony Castaneda	Using VR Headsets for Sci. Data Visualization	May 2022	
Solange Lanza Quisber	t Crime Data for Higher Education Institutions	Dec 2021	
NASA Space Grant			
Lohatt Manna	Abalyzing Remote Sensing data using LLMs	Aug 2024	
Edward Wynman	Data Access and Proc. workflows for hyp. Images	May 2023	
Stefan A Rohila			

Research Experien	ce 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 Independe	ent Studies / Student Projects			
Thai Tao Nguyen	Security Incidents at Colleges and Universities	May 2022		
Vincent Cavallaro	Multispectral Camera Design	May 2022		
Timothy Bull	Image Processing of Manuscripts	May 2022		
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 Compute	(Outstanding Computer Science Undergraduate 2006)			
Andrew Gershman	Automated Hyperspectral Data and Capture	Dec 2004		
Weston Scholars (Montclair High School)				

Scholars (Montclair High School)

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

Student Presentations (S.A. Robila - advisor)

- 1. O. Akanle, "Using Virtual Reality (VR) for Simulating Farmland Use Scenarios", poster, MSU Student Res. Symp, Montclair State Univ, Montclair, NJ, Apr 2024
- 2. L. Manna, "Machine Learning Algorithms for Sentiment Analysis in Large Image Datasets" a. poster, MSU Student Res. Symp, Montclair State Univ, Montclair, NJ, Sep 2023
 - b. poster, Garden State LSAMP Annual Conf, Rutgers Univ, New Brunswick, NJ, Oct 2023
- 3. E. Wynman, "Development of a Processing Workflow for Hyperspectral Images",
 - a. poster, MSU Student Research Symp, Montclair State University, Montclair, NJ, Apr 2023
 - b. poster, NJ Space Grant Consortium Spring Meeting, Montclair State Univ, Montclair, NJ, April 2023
 - c. poster, Cons for Computing Sci in Coll NE Region Annual Conf, Ithaca Coll, Ithaca, NY, April 2023

- 4. J. Olatunji, "Exploring Life Science through Extended Reality", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2023
- 5. I. Cumberbatch, "An Extended Reality Environment for Urban Area Environmental Data Analysis", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2023
- 6. A. Moctezuma, "A Framework for Evaluating Security and Usability of Parental Controls in Streaming Services"
 - a. poster, Scholarship recipient, Women in Cyber Security Conference, Denver, March 2023
 - b. poster and presentation, Casabona Future Sci Prog, Montclair State Univ, Montclair, NJ, Nov 2022
 - c. poster, Garden State LSAMP Annual Conf, NJIT, Newark, NJ, November 2022
- 7. I. Cumberbatch, "Environmental Study of Urban Areas Using Data Visualization with XR", PRELS Scholar poster, *Garden State LSAMP Annual Conf*, NJIT, Newark, NJ, November 2022
- 8. T. Thao Nguyen, "HEIs Under Threat Evaluating Cyber Attacks and Incident Response at Higher Education Institutions", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2022
- 9. A. Castaneda, "Data Visualization in a Three-Dimensional Space Using XR Technology", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2022
- 10. V. Cavallaro, "Design and Development of a Low Cost Multispectral Camera", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2022
- 11. A. Moctezuma, "Evaluation of Parental Control Features for Video Streaming Services", poster, *MSU Student Res Symp*, Montclair State Univ, Montclair, NJ, April 2022
- 12. S. Lanza Quisbert, "Visualization of Crime Data for Higher Education Institutions", poster, GS-LSAMP Research Conference, Montclair State Univ, Montclair, NJ, Feb 2022
- 13. M. Estwanick "Optimal Band Selection in Hyperspectral Data Using GPU", poster, *Consortium of Computing Sciences in Colleges Northeastern Region (CCSCNE)*, Holy Cross College, Worchester, MA, April 2015
- 14. M. Estwanick, "Optimal Band Selection in Hyperspectral Data", SC15 BE Poster Workshop, Lawrence Berkeley National Laboratory, Berkeley, CA, April 2015
- 15. M. Estwanick, "Using Graphical Processing Units for Computing Optimal Band Selection in Hyperspectral Data", pres, *Undergr Res Symp*, Montclair State Univ, Montclair, NJ, April 2015
- 16. C. Fleischl, "The GreenIT Project", Student Poster, Undergraduate Research Symposium Techlaunch, Montclair State University, Montclair, NJ, April 2014
- 17. C. Fleischl, C. Alvarez, G. Serviano, "The GreenIT Project", Student presentation, *Undergraduate Research Symposium*, Montclair State University, Montclair, NJ, April 2014
- 18. S. Kordecki, S. Gallo, "Optimal approaches for distributed computing based best band selection algorithms for hyperspectral image processing", poster, *Undergrad Res Symp*, Montclair State Univ, Montclair, NJ, April 2013
- 19. S. Gallo, S. Kordecki, "Optimal Distributed Computing Based Best Band Selection Algorithms for Hyperspectral Image Processing", poster, *Cons Comp Sci in Coll NE Region (CCSCNE)*, Siena Coll, Loudonville, NY, April 2013
- 20. C. Alvarez, T. Sears, "Fusion Techniques for Hyperspectral Image Visualization", Student poster, Cons of Comp Sci in Coll NE Region (CCSCNE), Siena Coll, Loudonville, NY, April 2013
- 21. T. Hall, K. Pirate, "Spatial Complexity Based Preprocessing for Hyperspectral Imagery", Student poster, *Cons* of Comp Sci in Coll NE (CCSCNE), Quinnipiac University, Hamden, CT, April 2012
- 22. M. Erdi, "Detection of Ripeness in Bananas using Hyper-spectral Images", New Jersey Academy of Science Annual Meeting, April 2012
- 23. M. Chang-Reyna^{*} "Investigating Face Recognition using Hyperspectral Images and Principal Components", poster, *Cons of Comp Sci in Coll SE Region (CCSCSE)*, Spellman Coll, Atlanta, GA, November 2010
- 24. D. Jackowitz (A. Varde co-advisor), "Non-metric Distances in Nanoscale Image Mining", Student poster, *Cons* of Comp Sci in Coll Eastern Region (CCSCE), Juniata Coll, Huntingdon, PA, October 2010
- 25. N. Damico, "Unsupervised Face Recognition using Hyperspectral Images and Spectral Angle", Student poster, *Cons of Comp Sci in Coll Eastern Region (CCSCE)*, Juniata College, Huntingdon, PA, October 2010
- 26. D. Halas, "Best Facial Expressions to Use for Increased Facial Recognition by Hyperspectral Imaging", New Jersey Academy of Science Annual Meeting, April 2010
- 27. G. Roughton, L. McKee^{*} (A. Varde co-advisor), "Comparing Feature Based and Wavelet Based Approaches to Image Processing", Student poster, *Cons of Comp Sci in Coll NE Region (CCSCNE)*, Univ of Hartford, West Hartford, CT, April 2010

- 28. K. Rice, "Hyperspectral Face Recognition", *National Science Foundation REU PI meeting*, Austin, TX, February 2008
- 29. J. W. Ragucci, "Getting Off the Hook (Learn to Catch the Phish: A Tool for User Education)", Sigma Xi, Montclair, NJ, May 2006
- 30. P. Kafara, "Security Data Loss Incidents: Policies and Reaction in Academic Institutions", Sigma Xi, Montclair, NJ, May 2006
- 31. J. Schicchi, "RFID: Security, Privacy, and Effective Application", Sigma Xi, Montclair, NJ, May 2006
- 32. D. McCarron, "Security of Wireless Access Points", Sigma Xi, Montclair, NJ, May 2006
- 33. L. G. Maciak, M. Alexis Ponniah, R. Sharma, "Applying Steganography to Music Captioning Embedding Lyrics in MP3 Files", Sigma Xi, Montclair, NJ, May 2006
- 34. S. Venugopal, "Interactive Survey Development Kit", Sigma Xi, Montclair, NJ, May 2006
- 35. R. Perriero, S. Jui, "Clustering and Computing: A Look at Inexpensive Design Ideas", Sigma Xi, Montclair, NJ, May 2005
- 36. A. Mohiuddin, R. Burus, "Generating Large Prime Numbers for Cryptographic Algorithms using Distributed Computing", Sigma Xi, Montclair, NJ, May 2005