

## Dr. Richard S. Segall

### Professor of Information Systems & Business Analytics (with Tenure)

**Current Address:** Dr. Richard S. Segall

Arkansas State University

Department of Information Systems & Business Analytics (ISBA), Neil Griffin College of Business  
State University, AR 72467-0130

**Phones:** 870-972-3989 (Office), 870-761-8923 (Cell), 870-931-9642 (Home)

**E-mail:** [rsegall@astate.edu](mailto:rsegall@astate.edu) and [rssegall@aol.com](mailto:rssegall@aol.com)

#### **Education:**

University of Massachusetts at Amherst, Ph.D., Operations Research, May 1984

Rensselaer Polytechnic Institute, M. S., Operations Research and Statistics, December 1975

Rensselaer Polytechnic Institute, M. S., Mathematics, May 1973

Rensselaer Polytechnic Institute, B. S., Mathematics, June 1971

#### **Employment:**

Arkansas State University, Professor of Information Systems & Business Analytics, 2021 to Present

Arkansas State University, Professor of Computer & Information Technology, 2012 to 2021

##### Affiliated Faculty Appointments:

1.) Center for No-Boundary Thinking (CNBT): Affiliate Member (2020 to Present)

Division of Algorithms and Computational Methodology: Affiliate Faculty

2.) Master of Engineering Management (MEM) Program, College of Engineering & Computer Science, Affiliate Faculty  
Arkansas State University, 2008 to Present.

3.) Environmental Sciences Program Faculty, Arkansas State University, 2011 to Present.

4.) University of Arkansas at Little Rock (UALR), Department of Information Science, Affiliate Faculty, 2011 to Present.

5.) University of Arkansas at Little Rock (UALR) Bioinformatics Program, Affiliate Faculty, 2011 to Present

6.) Arkansas Center for Plant-Powered Production (P3), Arkansas Biosciences Institute (ABI), 2008 to 2016.

7.) AI (Artificial Intelligence) Council: 2020 to Present

Arkansas State University, Associate Professor of Computer & Information Technology, 2004-2012

Arkansas State University, Associate Professor of Decision Sciences, 2002-2004

Arkansas State University, Senior Lecturer of Information Systems, 2001-2002

Arkansas State University, Associate Professor of Management Information Systems, 1998-2001

Albany State University, Associate Professor of Management Information Systems, 1997-98

Texas Tech University, Visiting Assistant Professor, 1996-97

Georgia College & State University, Assistant Professor of Management, 1992-94

Eastern Kentucky University, Part-time faculty, Mathematics, Statistics & Computer Science, 1991

University of Louisville, Visiting Assistant Professor of Mathematics, 1990-91

University of New Hampshire, Visiting Assistant Professor of Mathematics, 1989-90

University of Massachusetts-Lowell, Assistant Professor of Mathematics, 1985-89

West Virginia University, Assistant Professor of Management, 1984-85

Bowling Green State University, Instructor of Applied Statistics & Operations Research, 1977-78

#### **Professional Experience:**

Brooks AFB, TX, National Research Council (NRC) Summer Faculty Fellowship, San Antonio, TX, Summer 2000

Brooks AFB, TX, Senior Research Fellow, San Antonio, TX, 1993-95

U.S. Army Aberdeen Proving Grounds, Aberdeen, MD, Operations Research Analyst, 1976-77

CIBA-GEIGY Corporation, Co-operative Education Program, Ardsley, NY, Summers 1970 & 1971

#### **Courses Taught 1996-2025:**

Arkansas State University 1998-Present:

Database Management

Big Data for Business

Data Visualization for Business

Data Mining for Business (Undergraduate)

Data Mining (Graduate)

Advanced Data Mining (Graduate)

Advanced Data Base Concepts

Data Communications and Telecommunications for Business

Database Concepts and Data Warehousing (Undergraduate and Graduate)  
Management Information Systems (Undergraduate)  
Management Information Systems (Graduate)  
Production and Operations Management (Undergraduate)  
Engineering Statistics (Graduate Master of Engineering Management (MEM))  
Quality Control & Improvement (Graduate Master of Engineering Management (MEM))  
Operations Research (Graduate Master of Engineering Management (MEM))  
Survey of Information Systems (Graduate) [Also as a web-based on-line course]  
Microcomputer Applications

Albany State University 1997-1998:

Introduction to Business Information Systems  
Database Management  
Systems Analysis and Design  
Production and Operations Management  
Management Information Systems (Graduate)  
Decision Sciences (Graduate)

Texas Tech University 1996-1997:

Introduction to Production and Operations Management  
Information Systems for Managers (Graduate)  
Information Technology for Managers (Graduate)

#### **Faculty Development:**

- 1.) SAS® Visual Business Analyst Fast Track, 9 Sessions from May 18, 2022 to July 13, 2022
- 2.) SAS® Visual Analytics 1 for SAS® Viya®: Basics, July 27-28, 2020
- 2.) SAS® Visual Analytics 2 for SAS® Viya®: Advanced, July 29-30, 2020
- 3.) Machine Learning Using SAS Viya®, July 24-25, 2019
- 4.) Deep Learning Using SAS Software, SAS World Headquarters, Cary, NC, July 23, 2019
- 5.) SAS Visual Data Mining and Machine Learning in SAS Viya®: Interactive Machine Learning, SAS World Headquarters, Cary, NC, July 12, 2018 and July 22, 2019
- 7.) SAS Visual Statistics for Professors. SAS World Headquarters, Cary, NC, July 11, 2018
- 8.) SAS Visual Analytics: Getting Started for Professors. SAS World Headquarters, Cary, NC, July 10, 2018
- 9.) Manipulating Data and Analytics Using SAS University Edition. SAS World Headquarters, Cary, NC, July 9, 2018
- 10.) SAS JMP Software Workshop, A-STATE, College of Business, May 3, 2016
- 11.) Data Manipulation using SAS Enterprise Guide, SAS World Headquarters, Cary, NC, July 20, 2015
- 12.) SAS Visual Analytics: Getting Started, SAS World Headquarters, Cary, NC, July 21, 2015
- 13.) SAS Visual Statistics: Interactive Model Building, SAS World Headquarters, Cary, NC, July 22, 2015
- 14.) ORACLE 11g R2 Business Intelligence: Creating Analyses and Dashboards, ASU, Jonesboro, AR, April 29-30, 2013
- 15.) SAS Customer Connection for Data Mining, SAS World Headquarters, Cary, NC, June 14-15, 2011
- 16.) Neural Network Modeling, SAS World Headquarters, Cary, NC, July 22-23, 2010
- 17.) Applied Analytics Using SAS Enterprise Miner 6.1, SAS World Headquarters, Cary, NC, July 20-21, 2010
- 18.) Issues in Linear Model Building and Data Mining, SAS World Headquarters, Cary, NC, July 23-24, 2009
- 19.) Customer Segmentation with Numeric and Textual Data using SAS, SAS World Headquarters, Cary, NC, July 21-22, 2009
- 20.) SAS Programming Essentials for Educators Part I, SAS World Headquarters, Cary, NC, July 20, 2009
- 21.) Mining Textual Data Using SAS Text Miner for SAS9, SAS World Headquarters, Cary, NC, July 24-25, 2008
- 22.) Advanced Predictive Modeling Using SAS Enterprise Miner 5, SAS World Headquarters, Cary, NC, July 22-23, 2008
- 23.) SAS Programming Essentials for Educators II, SAS World Headquarters, Cary, NC, July 21, 2008
- 24.) Applied Analytics Using SAS Enterprise Miner 5.2, SAS World Headquarters, Cary, NC, August 7-10, 2007
- 25.) SAS Programming Essentials for Educators I, SAS World Headquarters, Cary, NC, August 5-6, 2007
- 26.) ORACLE Database 10g: Introduction to SQL, ORACLE University, ORACLE World Headquarters, Reston, VA, July 16-20, 2007

- 27.) ORACLE Database 10g: Administrative Workshop I, ORACLE University, July 18-22, 2005
- 28.) ORACLE 9i Database Administration Fundamentals I, ORACLE University, May 23-27, 2005
- 29.) ORACLE 9i Database Administration Fundamentals II, ORACLE University, June 6-10, 2005
- 30.) SAS Warehouse Administrator Workshop, ASU College of Business, 2003
- 31.) SAS Customer Relationship Management through Data Mining Workshop, 2002
- 32.) SAS Statistical Analysis and Data Mining Workshop, 2002
- 33.) Business Ethics Workshop, ASU College of Business, 2001
- 34.) Case Studies Writing Workshop, ASU College of Business, 2001
- 35.) ORACLE Spatial Data Workshop, ASU College of Business, 2001

**Awards:**

1. Arkansas State University, 2022 ISBA Department Awards: (1.) *Outstanding Professor*, (2.) *Outstanding External Service*, (3.) *Excellence in Research*.
2. Arkansas State University, *University Award: Excellence in Scholarship (Research) (2020) \$2500*.
3. Arkansas State University, *College of Business Faculty Award for Excellence in Research (2019)*.
4. *Session Best Paper Award, 20<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2016)*, Orlando, FL, July 5-8, 2016 (with S. Lu).
5. Arkansas State University, *College of Business Faculty Award for Excellence in Research (2015)*.
6. *Session Best Paper Award, 17<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2013)*, Orlando, FL, July 9-12, 2013 (with S. Lu, A. Sears, J. Radish, and T. Hahn).
7. *Poster Award, Third Place, Faculty/Staff, Computational Division, NSF Bioinformatics Workshop to Foster Collaborative Research*, March 3-5, 2013, Little Rock, AR.(with Shen Lu, T. Hahn)
8. Arkansas State University *College of Business Faculty Award for Excellence in External Service (2011)*.
9. *Session Best Paper Award, 15<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2011)*, Orlando, FL, July 19-22, 2011 (with Shen Lu)
10. *Session Best Paper Award, 14<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2010)*, Orlando, FL, July 2, 2010 (with Qingyu Zhang and Ryan Pierce).
11. *Session Best Paper Award, 13<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2009)*, Orlando, FL, July 13, 2009 (with Ryan Pierce).
12. *Session Best Paper Award, 12<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2008)*, Orlando, FL, July 2, 2008 (with Qingyu Zhang).
13. *Highly Commended Paper Award, Emerald Literati Network 2007 Award for Excellence*, for article in *Kybernetes: International Journal of Systems and Cybernetics*, April 2007.
14. *Best Faculty Poster Award, Arkansas Bioinformatics Symposium (ARBIOS)*, Arkansas State University, April 19, 2007 (with Qingyu Zhang).
12. Arkansas State University *College of Business Faculty Award for Excellence in Service (2004)*.

**Intellectual Contributions:**

**I. JOURNAL ARTICLES**

1. Segall, Richard S. (2024), "Transdisciplinary Applications of Data Visualization and Data Mining Techniques as Represented by Human Diseases", *Journal of Systemics, Cybernetics and Informatics (JSCI)*, Vol. 22, no. 7, pp. 6-15. <https://doi.org/10.54808/JSCI.22.07.6>
2. Segall, Richard S. (2024). ""Image Processing, Computer Vision, Data Visualization, and Data Mining for Transdisciplinary Visual Communication: What are the differences and which should or could you use?", *Journal of Systemics, Cybernetics and Informatics (JSCI)*, Vol. 22, no. 7, pp. 85-92. <https://doi.org/10.54808/JSCI.22.07.85>
3. Segall, Richard S., Takahashi, Soichiro and Prasanna Rajbhandari, Prasanna (2024). "Big Data Visualization for Black Sigatoka Disease of Bananas and Pathogen-Host Interactions (PHI) of Other Plants, *International Journal of Applied Research in Bioinformatics (IJARB)* Vol. 13, no.1: 1-22. <https://doi.org/10.4018/IJARB.361940>

4. Segall, Richard S., and Rajbhandari, Prasanna (2024). "Image Processing of Big Data for Plant Diseases of Four Different Plant Categories: Represented by Rice, Banana, Sunflower, and Potato." International Journal of Computer Vision and Image Processing (IJCVIP) vol.14, no.1 2024: pp.1-32. <https://doi.org/10.4018/IJCVIP.353913>
5. Ebsen, Ty, Segall, Richard S., Aboudja, Hyacinthe, Berleant, Daniel (2024). A Customer Service Chatbot Using Python, Machine Learning, and Artificial Intelligence. Journal of Systemics, Cybernetics and Informatics, Vol. 22, No. 33, pp.38-46. <https://doi.org/10.54808/JSCI.22.03.38>
6. Lu, Lucy M. & Segall, Richard. S. (2024). Extract Clinical Lab Tests from Electronic Hospital Records Through Featured Transformer Model. International Journal of Practical Healthcare Innovation and Management Techniques (IJPHIMT), Vol. 10, No.1, pp.1-18. <http://doi.org/10.4018/IJPHIMT.336529>
7. Segall, Richard S., and Soichiro Takashashi. "Data Visualization of Big Data for Predictive and Descriptive Analytics for Stroke, COVID-19, and Diabetes." International Journal of Big Data and Analytics in Healthcare (IJBDAH) Vol.8, No.1, 2023: pp.1-31. <http://doi.org/10.4018/IJBDAH.331996>
8. Segall, Richard S. (2023), "What is ChatGPT and its Present and Future for Artificial Intelligence in Trans-Disciplinary Communications?", Journal of Systemics, Cybernetics and Informatics, Vol. 21, No. 4, pp. 92-98. <http://doi.org/10.54808/JSCI.21.04.92>
9. Tsai, P-H, Berleant, D. Segall, R.S., Aboudja, H., Batthula, V., Dugguralla, S. & Howell, M., "Quantitative Technology Forecasting: A Review of Trend Exploration Methods", International Journal of Innovation and Technology Management (IJITM), Vol. 20, No. 4, 233002 (2023). <https://doi.org/10.1142/S0219877023300021>
10. Segall, Richard S. and Sankarasubbu, Vidhya. "Survey of Recent Applications of Artificial Intelligence for Detection and Analysis of COVID-19 and Other Infectious Diseases". International Journal of Artificial Intelligence and Machine Learning (IJAIML) Vol. 12, Issue 2, 2022, pp. 1-30. Available at: <https://www.igi-global.com/article/survey-of-recent-applications-of-artificial-intelligence-for-detection-and-analysis-of-covid-19-and-other-infectious-diseases/313574>
11. Segall, Richard S. and Sankarasubbu, Vidhya. "Using Open-Source Software for Business, Urban, and Other Applications of Deep Neural Networks, Machine Learning, and Data Analytics Tools" International Journal of Artificial Intelligence and Machine Learning (IJAIML) Vol. 12, Issue 1, 2022, pp. 1-28. Available at: <https://www.igi-global.com/pdf.aspx?tid=307905&ptid=278358&ctid=4&oa=true&isxn=9781683183907>
12. Batthula. Venkata Jaipal Reddy, Segall, Richard S., Aboudja, Hyacinthe., Berleant, Daniel & Tsai, Peng-Hung. Future Satellite Lifetime Prediction from the Historical Trend in Satellite Half-Lives". Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 20, No.3, pp. 40-45, 2022.
13. Lu, S., Piegler, L., Segall, R. S. (2022). Graph Sampling Through Graph Decomposition and Reconstruction Based on Kronecker Graphs. Journal of Systemics, Cybernetics and Informatics, Vol. 20, No. 2, 2022, pp.23-32. Available at <https://doi.org/10.54808/JSCI.20.02.23>
14. Batthula. Venkata Jaipal Reddy, Segall, Richard S., Howell, Michael, Aboudja, Hyacinthe., Berleant, Daniel & Tsai, Peng-Hung. "Forecasting of a Technology Using Quantitative Satellite Lifetime Data". Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 19, No.5, pp. 73-78, 2021.

15. Howell, Michael; Berleant, Daniel; Aboudja, Hyacinthe; Segall, Richard; and Tsai, Peng-Hung "Is technological progress a random walk? Examining data from space travel," Journal of the Arkansas Academy of Science (JAAS): Vol. 75, Article 14, 2021.  
DOI: <https://doi.org/10.54119/jaas.2021.7501>  
Available at: <https://scholarworks.uark.edu/jaas/vol75/iss1/14>
16. Niu, Gao; Segall, Richard S; Zhao, Zichen; MS Wu, Zhijan: A Survey of Open Source Statistical Software (OSSS) and Their Data Processing Functionalities, International Journal of Open Source Software and Processes (IJOSSP), Vol. 12, Issue 1, January-March 2021, pp. 1-20.
17. Batthula, Venkata Jaipal Reddy; Segall, Richard S.; Kodali, Venkat; Howell, Michael; Berleant, Daniel; and Aboudja, Hyacinthe; "Time Series Modeling of Lifespans of Earth Satellites", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 18, No. 5, 2020, pp. 62-67. Available at <http://www.iiisci.org/journal/sci/issue.asp?is=ISS2005>
18. Howell, Michael, Kodali, Venkat, Segall, Richard, Aboudja, Hyacinthe, Berleant, Daniel, "Moore's Law and Space Exploration: New Insights and Next Steps", Journal of Arkansas Academy of Science, Vol. 73, 2019. pp. 13-17. Available at <https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=3338&context=jaas>
19. Blevens, Nathaniel Bryce, Segall, Richard S. and Choppari, Sharanya: "Assessing Water Quality Characteristics of pH and Biochemical Oxygen Demand (CBOD) of Public Utility using Statistical Quality Control (SQC)", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol.17, No.3, 2019, pp. 62-70.
20. Segall, Richard S., Cook, Jeffrey S. and Niu, Gao; Overview of Big Data-Intensive Storage and its Technologies for Cloud and Fog Computing. International Journal of Fog Computing (IJFC), Vol. 2, No. 1, 2019, pp 74-113.
21. Kodali, V., Duggurala, R., Segall, R., Aboudja, A., and Berleant, D.; Travel to extraterrestrial bodies over time: some exploratory analyses of mission data. Journal of Arkansas Academy of Science, Vol. 72, pp. 58-66, 2018. Available at <https://scholarworks.uark.edu/jaas/vol72/iss1/13/>
22. Segall, Richard S. and Niu, Gao; Overview of Big Data and Its Visualizations for Fog Computing, International Journal of Fog Computing (IJFC), Vol. 1, No.2, 2018, pp. 51-82.
23. Akarapu, V., Gunkala, S., Pattigadapa, S., Pattigadappa, BK, Ponnappalli, S. and Segall, RS; Statistical Quality Control and Improvement of Waste Water Treatment Plant, Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 14, No. 6, 2016, pp. 47-51.
24. Lu, Shen and Segall, Richard S., "Combination of Bayesian and Latent Semantic Analysis with Domain Specific Knowledge", Journal of Systemics, Cybernetics and Informatics (JSCI), v. 14, No. 3, 2016, pp.43-50.
25. Pippinger, Nickolas; Segall, Richard S; Berleant, Daniel; Eversole, Kellye A; Mustell, Robert A; Vicuna-Requesens, Deborah; and Hood, Elizabeth E, "Extracting Numerical Information about Corn Composition from Texts", Journal of Systemics, Cybernetics and Informatics (JSCI), v.13, n.5, 2015, pp. 68-75.
26. Lu, Shen, Segall, Richard S. and Hahn, Thomas, "Data Mining on Survival Prediction after Chemotherapy for Diffuse Large-B-Cell Lymphoma and Genomics of Metastasis Cancer", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 12, No. 7, pp. 35-42.

27. Lu, Shen, Sears, Alfred; Radish, Joseph, Segall, Richard S. and Hahn, Thomas F., "Discovery of Strong Association Rules for Attributes from Data for Program of All-Inclusive Care for the Elderly," Journal of Systemics, Cybernetics and Informatics, Vol. 12, No. 1, 2014, pp. 21-26.
28. Segall, Richard S., "Computational Dimensionalities of Global Supercomputing, Invited paper in Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 11, No. 9, 2013, pp. 75-86.
29. Lu, Shen and Segall, Richard S., "Multi-SOM: an Algorithm for High-Dimensional Small Size Datasets", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol.11, No.2,2013, pp.41-46.
30. Lu, Shen and Segall, Richard S., "Linkage in Medical Records and Bioinformatics Data", International Journal of Information and Decision Sciences (IJIDS), Vol.5, No.2,2013,pp. 169-187.
31. Lu, Shen and Segall, Richard S., "Statistical Quality Control of Microarray Gene Expression Data," Journal of Systems, Cybernetics and Informatics (JSCI), Vol.9, No. 7, 2011, pp. 63-68.
32. Segall, Richard S., Zhang, Qingyu, and Pierce, Ryan, "Data Mining Supercomputing with SAS JMP® Genomics", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 9, No. 1, 2011, pp.28-33.
33. Zhang, Qingyu and Segall, Richard S., "Review of Data, Text and Web Mining Software," Kybernetes: International Journal of Cybernetics, Systems and Management Sciences, Vol. 39, Number 4, 2010, pp. 625-655.
34. Segall, Richard S. and Pierce, Ryan M., "Advanced Data Mining of Leukemia Cell Micro-Arrays", Journal of Systemics, Cybernetics and Informatics (JSCI), Volume 7, Number 6, 2009, pp.60-66.
35. Segall, Richard S. and Zhang, Qingyu, "Web Mining Technologies for Customer and Marketing Surveys", Kybernetes: The International Journal of Cybernetics, Systems and Management Sciences, Vol. 38, Number 6, 2009, pp. 929-953.
36. Segall, Richard S. and Zhang, Qingyu, "Web Mining of Hotel Customer Survey Data", Journal of Systemics, Cybernetics and Informatics (JSCI), Vol. 6, Number 6, 2008, pp. 23-29.
37. Zhang, Qingyu and Segall, Richard S., "Web mining: A survey of current research, techniques and software," International Journal of Information Technology and Decision Making, Volume 7, Number 4, December 2008, pp.683-720.
38. Segall, Richard S., Guha, Gauri S., and Nonis, Sarath A., "Data Mining of Environmental Stress Tolerances for Plants," Kybernetes: The International Journal of Cybernetics, Systems and Management Sciences, Volume 37, Number 1, 2008, pp. 127-148.
39. Segall, Richard S. and Zhang, Qingyu, "Data Visualization and Data Mining of Continuous Numerical and Discrete Nominal-Valued Microarray Databases for Bioinformatics," Kybernetes: The International Journal of Systems & Cybernetics, Volume 35, Number 10, 2006, pp. 1538-1566. [Manuscript accepted without revision]  
*Recipient of "Highly Commended Paper" Award by Emerald Journals*
40. Guha, Gauri S., Nonis, Sarath A., Baral, A., and Segall, R. S., "The Potential of Biotechnology: Promises, Perils and Perplexities - A Survey of Impacts on Relevant Economic Sectors"; Journal of Academy of Economics and Economic Education, Volume 6, Number 1, 2005, pp. 87-115. [Also appeared in Volume 5, Number 2, 2004, pp. 107-132.]

41. Segall, Richard S., "Incorporating Data Mining and Computer Graphics for Modeling of Neural Networks"; Kybernetes: The International Journal of Systems & Cybernetics, Volume 33, Number 8, 2004, pp.1258-1276.
42. Fish, Kelly E., and Segall, Richard S., "A Visual Analysis of Learning Rule Effects and Variable Importance for Neural Networks Employed in Data Mining Operations" Kybernetes: The International Journal of Systems & Cybernetics; 2004, Vol. 33 No. 7, pp. 1127-1142.
43. Nonis, Sarath A., Guha, Gauri S., and Segall, Richard, "The Impact of Consumer Attitudes about Biotechnology on Purchase Behavior Intentions: Moderating Effects of Innate Consumer Innovativeness and Anxiety" Journal of Business & Economic Research, Vol. 2, No. 5, pp. 65-78, May 2004.
44. Segall, Richard S., "Some Quantitative Methods for Determining the Capacities and Locations of Military Emergency Medical Facilities;" Applied Mathematical Modelling, Vol. 24, No. 5/6, May 2000, pp. 365—389.
45. Jaraledi, Majid, Segall, Richard S., and Rajamohan, Venkatramani, "Multi-Class Decision Procedures for the Inspection Operation;" Journal of Applied Mathematics and Decision Sciences, Vol. 2, No. 2, 1998, pp. 159—176.
46. Segall, Richard S., "Determining Optimal Capacities and Geographical Locations of Emergency Medical Facilities for Occupational Accidents" Mathematical Modelling and Scientific Computing, Vol. 7, No. 2, 1997.
47. Segall, Richard S., "Some Mathematical and Computer Modelling of Neural Networks;" Applied Mathematical Modelling, Vol. 19, No. 7, July 1995, pp. 386—399.
48. Segall, Richard S., "Mathematical Modelling of Spatial Price Equilibrium for Multi-commodity Consumer Flows of Large Markets Using Variational Inequalities"; Applied Mathematical Modelling, Vol. 19, No. 2, February 1995, pp. 112—122.
49. Jaraiedi, Majid, Segall, Richard S., and Tsai, Yuh-Horng, "Multi-Criteria Decision Procedures for the Inspection Operation;" Journal of Design and Manufacturing, Vol. 5 No. 1, 1995, pp. 25—44.
50. Copeland, Arthur H, Ringo, Chris D., Moore, Ill, Berrien, and Segall, Richard S., "Mathematical Modelling for Singular Value Decomposition Problems for Oceans;" Applied Mathematical Modelling, Vol. 17, No. 10, October 1993, pp. 536—546.
51. Segall, Richard S., "An Update on Bi-level Geometric Programming: A new optimization model;" Applied Mathematical Modelling, Vol. 17, No. 4, April 1993, pp. 219—222.
52. Segall, Richard S., "Deterministic Mathematical Modelling for the Spatial Allocation of Multi-categorical Resources: with an Application to Real Health Data" Journal of the Operational Research Society, Vol. 43, No. 6, June 1992, pp. 579—589.
53. Copeland, Arthur H., Segall, Richard S., Ringo, Chris D., and Moore, III, Berrien, "Mathematical Modelling for Inverse Problems for Oceans;" Applied Mathematical Modelling, Vol. 15, No. 11/12, November—December 1991, pp. 586—595.
54. Jaraiedi, Majid and Segall, Richard S., "Mathematical Modelling of Dodge-Romig Sampling Plans for Random Incoming Quality;" Applied Mathematical Modelling, Vol. 14, No. 5, May 1990, pp. 264—270.



55. Segall, Richard S., "Using Branch-and-Bound to Solve Bi-level Geometric Programming Problems: A new optimization model;" Applied Mathematical Modelling, Vol.14, No.5, May 1990, pp.271-274.
56. Segall, Richard S., "Some Deterministic and Stochastic Nonlinear Optimization Modelling for the Spatial Allocation of Multi-Categorical Resources: with an application to real health data;" Applied Mathematical Modelling, Vol. 13, No. 11, November 1989, pp. 641–650.
57. Segall, Richard S., "Some Nonlinear Optimization Modelling for Planning Objectives of Large Market Oriented Systems: with an application to real health data", Applied Mathematical Modelling, Vol. 13, No. 4, April 1989, pp. 203–214.
58. Segall, Richard S. "Mathematical Modelling for the Capacity Planning of Market Oriented Systems: with an application to real health data", Applied Mathematical Modelling, Vol. 12, No. 4, August 1988, pp. 366–378.

## II. BOOKS

1. Segall, Richard S. and Niu, Gao (2022), Biomedical and Business Applications Using Artificial Neural Networks and Machine Learning, IGI Global, Hershey, PA, 2022. ISBN 13: 978-1-7998-84552 *Advances in Computational Intelligence and Robotics (ACIR) Book Series*. [394 pages]  
<https://www.igi-global.com/book/biomedical-business-applications-using-artificial/270789>
2. Segall, Richard S. and Niu, Gao (2020), Open Source Software for Statistical Analysis of Big Data: Emerging Research and Opportunities, IGI Global, Hershey, PA, 2020. [237 pages]  
ISBN 13: 978-1-7998-2768-9  
<https://www.igi-global.com/book/open-source-software-statistical-analysis/237841>
3. Segall, Richard S. and Cook, Jeffrey S. (2018), Handbook on Big Data Storage and Visualization Techniques, IGI Global, Hershey, PA, 2018. [2 volumes, 917 pages] ISBN 13: 978-1-52-253142-5.  
<https://www.igi-global.com/book/handbook-research-big-data-storage/179829>  
[Selected "Featured Book" of IGI Global in Computer Science & Information Technology for 2018-2019.]
4. Segall, Richard S., Cook, Jeffrey S. and Zhang, Qingyu (2015), Research and Applications in Global Supercomputing, IGI Global, Hersey, PA, 2015, 672 pages, ISBN 13: 978-1-46-667461-5.  
<https://www.igi-global.com/book/research-applications-global-supercomputing/118093>
5. Zhang, Qingyu and Segall, Richard S. and Cao, Mei (2011), Visual Analytics and Interactive Technologies: Data, Text and Web Mining Applications, IGI Global, Hershey, PA, 2011, 350 pages, ISBN 13: 978-1-60-960102-7.  
<https://www.igi-global.com/book/visual-analytics-interactive-technologies/41910>

## III. CHAPTERS IN BOOKS

1. Segall, Richard S., "Overview of Multi-Factor Prediction Using Deep Neural Networks, Machine Learning and Their Open Source Software", Biomedical and Business Applications Using Artificial Neural Networks and Machine Learning, Chapter 1, IGI Global, Hershey, PA, 2022, pp. 1-28.
2. Segall, Richard S., "Survey of Applications of Neural Networks and Machine Learning to COVID-19 Predictions", Biomedical and Business Applications Using Artificial Neural Networks and Machine Learning, Chapter 2, IGI Global, Hershey, PA, 2022, pp. 30-57.
3. Lu, Shen and Segall, Richard S., "Data Streaming Processing Window Join with Graphical Processing Units (GPUs)", Encyclopedia of Organizational Knowledge, Administration, and Technologies (Mehdi Khosrow-Pour, Editor), Chapter 43. IGI Global, Hershey, PA, 2021, pp. 602-623.



4. Segall, Richard S. and Niu, Gao, "Big Data and Its Visualization with Fog Computing", Cognitive Analytics: Concepts, Methodologies, Tools, and Applications, Vol. 1, Chapter 19. IGI Global (Information Resources Management Association (IRMA)), 2020, pp. 341-377.
5. Segall, Richard S., What is Open-Source Software (OSS) and what is Big Data? Chapter 1 of Open Source Software for Statistical Analysis of Big Data: Emerging Research and Opportunities, edited by Segall, R.S. and Niu, G., IGI Global, 2020, pp. 1-49. Also appears in Research Anthology on Big Data Analytics, Architectures, and Applications, Vol. 1, Chapter 5, pp. 77-118. Information Resources Management Association (IRMA), 2022.
6. Segall, Richard S. Open Source Software (OSS) for Big Data, Chapter 2 of Open Source Software for Statistical Analysis of Big Data: Emerging Research and Opportunities, edited by Segall, R.S. and Niu, G., IGI Global, 2020, pp. 50-72.
7. Segall, Richard S. and Niu, Gao, "Overview of Big Data and its Visualizations", Chapter 1 of Handbook of Big Data Storage and Visualization Techniques, v.1, IGI Global, Hershey, PA, 2018, pp.1-32. Also appears in Research Anthology on Big Data Analytics, Architectures, and Applications, Vol. 1, Chapter 19, pp. 341-377. Information Resources Management Association (IRMA), 2022.
8. Segall, Richard S. and Cook, Jeffrey S., "Overview of Big Data-Intensive Storage and its Technologies", Chapter 2 of Handbook of Big Data Storage and Visualization Techniques, Vol. 1, IGI Global, Hershey, PA, 2018, pp. 33-75.
9. Segall, Richard S. and Lu, Shen, "Data Linkage Discovery Applications", Encyclopedia of Information Science and Technology (IST), 4<sup>th</sup> edition, IGI Global, Hershey, PA, 2018, Chapter 155, pp.1783-1793. Also appears in Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics, (Mehdi Khosrow-Pour, Editor) Vol. 1, IGI Global, Hershey, PA, 2019. Chapter 26, pp. 354-366.
10. Segall, Richard S. and Neha Gupta, "Overview of Global Supercomputing," Research and Applications in Global Supercomputing edited by Segall, RS, Cook, JS and Zhang, Q., IGI Global, Hersey, PA, 2015, pp. 1-32.
11. Segall, Richard S. and Lu, Shen, "Information Retrieval by Linkage Discovery," Encyclopedia of Information Science & Technology, Mehdi Khosrow-Pour, Editor, IGI Global, Hersey, PA, 2015, Chapter 387, pp. 3932-3939.
12. Segall, Richard S. and Lu, Shen, "Linkage Discovery with Glossaries", Encyclopedia of Business Analytics & Optimization, John Wang, Editor, IGI Global, Hersey, PA, 2014, Chapter 128, pp. 1411-1421.
13. Zhang, Qingyu and Segall, Richard S., "Commercial Data Mining Software," Data Mining and Knowledge Discovery Handbook, second edition, Oden Maimon and Lior Rokach, Editors, Chapter 65, pp. 1245-1268, Springer-Verlag Press, 2010, ISBN: 0-38-709822-4.
14. Segall, Richard S. and Zhang, Qingyu, "A Survey of Selected Software Technologies for Text Mining", Software Applications: Concepts, Methodologies, Tools, and Applications, Editor P. F. Tiako, Volume 2, Chapter 3.4, pp. 1164-1181, Information Science Reference, Hershey, PA, 2009, ISBN 978-1-60566-060-8. [Reprinted from Handbook of Research on Text and Web Mining Technologies, Edited by Min Song and Yi-Fang Wu, 2009.]
15. Segall, Richard S. and Zhang, Qingyu, "Comparing Four-Selected Data Mining Software", Software Applications: Concepts, Methodologies, Tools, and Applications, Editor P.F. Tiako, Volume 3, Chapter 4.22, pp. 1750-1759, Information Science Reference, Hershey, PA, 2009,

ISBN 978-1-60566-060-8. [Reprinted from Handbook of Research on Text and Web Mining Technologies, Edited by Min Song and Yi-Fang Wu, 2009.]

16. Zhang, Qingyu and Segall, Richard S., "Using Data Mining for Forecasting Data Management Needs", Data Warehousing and Mining: Concepts, Methodologies, Tools and Applications, Editor John Wang, Chapter 4.27, pp. 2088-2104, Information Science Reference, Hershey, PA, 2009, ISBN 978-1-59904-951-9. [Reprinted from Handbook of Computational Intelligence in Manufacturing and Production Management, Edited by Purnendu Mandal and Dipak Laha, 2008.]
17. Segall, Richard S. and Zhang, Qingyu, "A Survey of Selected Software Technologies for Text Mining", Handbook of Research on Text and Web Mining Technologies, Chapter XLIV, Editors Min Song and Yi-Fang Wu, IGI Global Publishing Inc., 2009, ISBN 978-159904990-8, pp.766-784.
18. Segall, Richard S. and Zhang, Qingyu, "Comparing Four-Selected Data Mining Software", Encyclopedia of Data Warehousing and Mining, Chapter XLV, Second Edition, Edited by John Wang, Montclair State University, USA; pp. 269-277, IGI Global Publishing Inc., 2009. ISBN 978-1-60566-010-3.
19. Zhang, Qingyu and Segall, Richard S., "Using Data Mining for Forecasting Data Management Needs", Handbook of Computational Intelligence in Manufacturing and Production Management, Edited by Purnendu Mandal and Dipak Laha, Chapter XXI, pp.419-436, Information Science Reference, IGI Global Publishing Inc., Hersey, PA, 2008, ISBN 978-159904582-5.
20. Segall, Richard S., "Data Mining of Microarray Databases for Biotechnology," Encyclopedia of Data Warehousing and Mining, Edited by John Wang, Montclair State University, USA; Idea Group Inc., 2006, ISBN 1-59140-557-2, pp.734-739.
21. Rising, Edward J., Segall, Richard S., and Mayhew, L. D., "Patient Travel and Use of Hospitals in Massachusetts: An Application of RAMOS;" 13th volume of London Paper in Regional Science: Planning and Analysis in Health Care Systems, Ed. M. Clarke, Pion Limited, London, England; 1984; pp. 210-220.

#### IV. CONFERENCE PROCEEDINGS (All Refereed)

1. McDonald, A., Segall, R.S., Tsai, P-H and Berleant, D., Predicting Future Participation of Women in Space by Analyzing Past Trends, Proceedings of the 28<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2024), pp. 228-235.  
<https://doi.org/10.54808/WMSCI2024.01.228>
2. Ebsen, T., Segall, R. S., Aboudja, H., Berleant, D. (2024). A Customer Service Chatbot Using Python, Machine Learning, and Artificial Intelligence. In N. Callaos, S. Hashimoto, N. Lace, B. Sánchez, M. Savoie (Eds.), Proceedings of the 15<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2024, pp. 148-156. International Institute of Informatics and Cybernetics. <https://doi.org/10.54808/IMCIC2024.01.148>
3. Batthula, Venkata Jaipal Reddy, Segall, Richard S. and Cingireddy, Anirudh Reddy: "Post-Pandemic Analysis of the Broader Impact of COVID-19 on the World's Economy, Health and Education", Proceedings of the 27<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics, 2023 pp.286-293.
4. Duggirala, S., Aboudja, H., Batthula, V., Howell, M., Segall, R.S., Tsai, P-H, & Berleant, D., "Women in Space from Historical Trend to Future Forecasts", Proceedings of Oklahoma Academy of Science (POAS), 2022, Vol. 102, pp. 101-108.

5. Batthula, Venkata J.R., Segall, Richard S., Aboudja, Hyacinthe, Berleant, Daniel, & Tsai, Peng-Hung; "Future Satellite Lifetimes Prediction from the Historical Trend in Satellite Half-Lives", Proceedings of the 26<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2022), July 12-15, 2022, pp. 6-11.
6. Lu, Shen; Piegler, Les and Segall, Richard S. "Graph Sampling Through Graph Decomposition and Reconstruction Based on Kronecker Graphs", Proceedings of 13<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2022), March 8-11, 2022, Vol. 1, pp.10-17.
7. Tsai, PH., Berleant, D., Segall, R.S., Aboudja, H., Batthula, V.J.R., Howell, M. (2022). Spacecraft for Deep Space Exploration: Combining Time and Budget to Model the Trend in Lifespan. In: Arai, K. (Editor) Proceedings of the Future Technologies Conference (FTC) 2021, Vol. 3. Lecture Notes in Networks and Systems, vol 360. Springer, Cham. [https://doi.org/10.1007/978-3-030-89912-7\\_25](https://doi.org/10.1007/978-3-030-89912-7_25)
8. Batthula. V.J. R, Segall, R.S., Howell, M., Aboudja, H., Berleant, D. & Tsai, P-H. Forecasting of a Technology Using Quantitative Satellite Lifetime Data, Proceedings of the 25th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2021), July 18-21, 2021.
9. Batthula, Venkata Jaipal Reddy; Segall, Richard S.; Kodali, Venkat; Howell, Michael; Berleant, Daniel; and Aboudja, Hyacinthe; "Time Series Modeling of Lifespans of Earth Satellites", Proceedings of 24th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2020), Orlando, FL, September 13-16, 2020, v. 2, pp. 1-6. Available at: <http://www.iis.org/CDs2020/CD2020Summer/papers/SA466YN.pdf>
10. Blevens, Nathaniel Bryce, Segall, Richard S. and Choppari, Sharanya: "Assessing Water Quality Characteristics of pH and Biochemical Oxygen Demand (CBOD) of Public Utility using Statistical Quality Control (SQC)" Proceedings of 23rd World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2019), Orlando, FL, July 6-9, 2019, v.2, pp.11-18.
11. Hall, Chelsea; Berleant, Daniel; Segall, Richard S.; and Lu, Shen; "Steps toward Quantifying Advancement in Space Exploration", Proceedings of 20th World Multi-Conference on Systemics, Cybernetics and Informatics, Volume II, WMSCI 2017, Orlando, FL, July 8-11, 2017, pp. 106-112.
12. Segall, Richard S., Technologies for Teaching Big Data Analytics, Proceedings of 48th Meeting of Southwest Decision Sciences (SWDSI), Little Rock, AR, March 8-11, 2017, pp. 1611-1625.
13. Hahn, Thomas; Rahman, Hidayat Ur; Segall, Richard; Heim, Christoph; Brunson, Raphaela, Brunson, Sharma, Ankush; Asiam, Maryam; Lara-Rodriguez, Ama; Jslam, Sahidial; Gupta, Neha; Embry, Charles S.; Grossman, Patrick; Babar, Shahrukh; Skibinski, Gregory; and Tang, Fusheng; "Remote Access Programs to Better Integrate Individuals with Disabilities", Proceedings of the 7<sup>th</sup> International ACM SIGACCESS Conference in Computers and Accessibility, Reno, NV; October 24-25, 2016.
14. Rahman, Hidayat; Hahn, Thomas and Segall, Richard; "Disease Named Entity Resolution using Conditional Random Fields," Proceedings of the 7<sup>th</sup> International Symposium on Semantic Mining in Biomedicine (SMBM 2016), Potsdam, Germany, August 4-5, 2016.
15. Lu, Shen and Segall, Richard S., "Combination of Bayesian and Latent Semantic Analysis with Domain Specific Knowledge", Proceedings of 20<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics, Volume I, WMSCI 2016, Orlando, FL, July 5-8, 2016, pp. 79-86.
16. Akarapu, Vikranth; Gunkala, Sairam; Pattigadapa, Sahitya; Pattigadappa, Bharani Krishna; Ponnappalli, Srikar and Segall, Richard S., "Statistical Quality Control and Improvement of Waste Water Treatment Plant", Proceedings of 20<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics, Volume II, WMSCI 2016, Orlando, FL, July 5-8, 2016, pp. 12-17.

17. Pippinger, Nickolas; Segall, Richard S; Berleant, Daniel; Eversole, Kellye A; Mustell, Robert A; Vicuna-Requesens, Deborah; and Hood, Elizabeth E, "Extracting Numerical Information about Core Composition from Texts", Proceedings of 19<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2015, Orlando, FL, July 12-15, 2015, pp. 93-100.
18. Lu, Shen, Segall, Richard S. and Hahn, Thomas, "Data Mining on Survival Prediction after Chemotherapy for Diffuse Large-B-Cell Lymphoma and Genomics of Metastasis Cancer", Proceedings of 18th Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2014), July 15-18, 2014, Orlando, FL
19. Segall, Richard S. and Cook, Jeffrey; "Data Visualization and Information Quality by Supercomputing", Proceedings of the Forty-Fifth Meeting of Southwest Decision Sciences Institute (SWDSI), Dallas, TX, March 12-15, 2014.
20. Segall, Richard S. and Zhang, Qingyu, "Information Quality and Supercomputing", Proceedings of the 18<sup>th</sup> International Conference on Information Quality (ICIQ 2013), Little Rock, AR, November 8-9, 2013, pp. 400-446.
21. Lu, Shen; Sears, A., Radish, J, Segall, Richard S and Thomas, T. "Discovery of Strong Association Rules for Attributes from Data for Program of All-Inclusive Care for the Elderly", Proceedings of the 17<sup>th</sup> Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2013), Orlando, FL, July 10-12, 2013.
22. Segall, Richard S.; Zhang, Qingyu and Cook, Jeffrey S., "Overview of Current Research in Global Supercomputing", Proceedings of Forty-Fourth Meeting of Southwest Decision Sciences Institute (SWDSI), Albuquerque, NM, March 12-16, 2013.
23. Lu, Shen and Segall, Richard S., "Multi-SOM: an Algorithm for High-Dimensional Small Size Datasets", Proceedings of 16<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2012, Orlando, FL, July 17-20, 2012, pp. 219-224.
24. Lu, Shen, Segall, Richard S. and Belford, Robert E., "Linkage Discovery within Symposium Proceedings", Technical Proceedings of 6<sup>th</sup> BioNanoTox and Applications Research Conference, Little Rock, AR, November 17-18, 2011.
25. Lu, Shen and Segall, Richard S., "Data Quality Control and Segmentation for Bioinformatics", Poster Abstract in Proceedings of Arkansas P3 Symposium and Arkansas NSF EPSCoR Annual Meeting, Heber Spring, AR, July 26-28, 2011.
26. Lu, Shen and Segall, Richard S., "Statistical Quality Control of Microarray Gene Expression Data", Proceedings of 15<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2011, Orlando, FL, July 19-July 22, 2011.
27. Segall, Richard S. and Moeeni, Farhad, "Review of Data Scrubbing and Cleaning Methods for Improving Information Quality" Poster Abstract in Proceedings of 15<sup>th</sup> International Conference on Information Quality (ICIQ-2010), University of Arkansas at Little Rock (UALR), Little Rock, AR, November 12-14, 2010.
28. Lu, Shen and Segall, Richard S. and Atiff, Samin, "Using Entity Resolution to Discover Scientific Numbers," Poster Abstract in Proceedings of 15<sup>th</sup> International Conference on Information Quality (ICIQ-2010), University of Arkansas at Little Rock (UALR), Little Rock, AR, November 12-14, 2010.

29. Segall, Richard S. and Zhang, Qingyu, "Open-Source Software Tools for Data Mining Analysis of Genomic and Spatial Images using High Performance Computing" Proceedings of 5<sup>th</sup> INFORMS Workshop on Data Mining and Health Informatics, Austin, TX, November 6, 2010.
30. Vicuna-Requesens, Deborah V., Eversole, Kellye A., Mustell, Robert A., Segall, Richard S., Berleant, Daniel, Hood, Elizabeth, "Establishing a Baseline Database to Demonstrate Substantial Equivalence of GE and non-GE crops through Data Mining and Text Mining", Abstract, Plant Biology 2010: Joint Annual Meeting of the American Society of Plant Biologists (ASPB), Montreal, Quebec, Canada, July 31-August 4, 2010. [GE = Genetically Engineered]
31. Segall, Richard S., Zhang, Qingyu, and Pierce, Ryan, "Data Mining Supercomputing with SAS JMP® Genomics", Proceedings of 14<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2010, Orlando, FL, June 29-July 2, 2010.
32. Segall, Richard S., Zhang, Qingyu and Pierce, Ryan M. "Data Mining Supercomputing with SAS JMP® Genomics: Research-in-Progress", Proceedings of 2010 Conference on Applied Research in Information Technology, sponsored by Acxiom Laboratory of Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, April 9, 2010.
33. Segall, Richard S. and Samin Atiff, Daniel Berleant, Chris Biedenbender, Kellye Eversole, Elizabeth Hood, Jagadish Pamarthi, Deborah Vicuna-Requesens: "Using Text Mining for Data Classification & Categorization: Research-in-Progress", Proceedings of 2010 Conference on Applied Research in Information Technology, sponsored by Acxiom Laboratory of Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, April 9, 2010.
34. Fish, Kelly, Segall, Richard S., Seydel, John, and Sinclair, Jollean, "Assessing Technology Skills of Business Students", Proceedings of 41<sup>st</sup> Annual Conference of Southwest Decision Sciences Institute, Dallas, TX, March 4-6, 2010.
35. Segall, Richard S., Zhang, Qingyu and Pierce, Ryan M., "Visualization by Supercomputing Data Mining", Proceedings of the 4<sup>th</sup> INFORMS Workshop on Data Mining and System Informatics, San Diego, CA, October 10, 2009.
36. Segall, Richard S. and Zhang, Qingyu, "Data Mining and Visualization of Mouse Genome Data," Proceedings of 13<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2009, Orlando, FL, July 10-13, 2009.
37. Segall, Richard S. and Pierce, Ryan M., "Advanced Data Mining of Leukemia Cell Micro-Arrays", Proceedings of 13<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2009, Orlando, FL, July 10-13, 2009.
38. Segall, Richard S. and Pierce, Ryan M., "Data Mining of Leukemia Cells using Self-Organized Maps," Proceedings of 2009 Conference on Applied Research in Information Technology, sponsored by Acxiom Laboratory of Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, February 13, 2009, pp. 92-98.
39. Segall, Richard S. and Pierce, Ryan M., "Advanced Data Mining of Leukemia Cells" Research-in-Progress Abstract, Proceedings of 2009 Conference on Applied Research in Information Technology, sponsored by Acxiom Laboratory of Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, February 13, 2009, pp. 104-108.
40. Segall, Richard S. and Zhang, Qingyu, "Data Mining of Mouse Genome Data", Research-in-Progress Abstract, Proceedings of 2009 Conference on Applied Research in Information Technology, sponsored by Acxiom Laboratory of Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, February 13, 2009, pp. 109-113.

41. Segall, Richard S., Zhang, Qingyu, and Cao, Mei, "Web-based Text Mining of Hotel Customer Comments Text using SAS® Text Miner and Megaputer PolyAnalyst®", Proceedings of Fortieth Annual Conference of Southwest Decision Sciences Institute, Oklahoma City, OK, February 24-28, 2009, pp. 141-152.
42. Zhang, Qingyu and Segall, Richard S., "Visual Analytics of Mining Human Lung Cancer Data", Proceedings of the 3<sup>rd</sup> INFORMS Workshop on Data Mining and Health Informatics, (DH-HI 2008), J.Li, D. Aleman, and R. Sikora, Editors, October 11, 2008, Washington, DC, Paper D1.1, p.1-6.
43. Segall, Richard S. and Zhang, Qingyu, "Web Mining of Hotel Customer Survey Data", Proceedings of the 12<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics (WMSCI 2008), Orlando, FL, June 29-July 2, 2008.
44. Segall, Richard S. and Zhang, Qingyu, "Teaching Web Mining in the Classroom: with an Overview of Web Usage Mining," Proceedings of the Thirty-ninth Annual Conference of the Southwest Decision Sciences Institute, vol. 39, no. 1, Houston, TX, March 4-6, 2008, p. 76-86.
45. Segall, Richard S. and Zhang, Qingyu, "Data Mining of Microarray Databases for Human Lung Cancer, Proceedings of the Thirty-eighth Annual Conference of the Southwest Decision Sciences Institute, vol. 38, no. 1, March 15-17, 2007, San Diego, CA.
46. Zhang, Qingyu and Segall, Richard S., "Data Mining of Forest Cover and Human Lung Micro-Array Databases with Four-Selected Software", Proceedings of the 2007 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Arkansas-Fayetteville, March 9, 2007.
47. Segall, Richard S. and Zhang, Qingyu, "Applications of Neural Network and Genetic Algorithm Data Mining Techniques in Bioinformatics Knowledge Discovery - A Preliminary Study", Proceedings of the Thirty-seventh Annual Conference of the Southwest Decision Sciences Institute, vol. 37, no. 1, March 2-4, 2006, Oklahoma City, OK.
48. Segall, Richard S. and Zhang, Qingyu, "Data Visualization and Data Mining of Micro-Array Databases for Biotechnology", Proceedings of the 2006 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Central Arkansas, March 3, 2006, pp. 121-128.
49. Segall, Richard S., "Data Mining of Microarray Databases for the Analysis of Environmental Factors on Plants Using Cluster Analysis and Predictive Regression", Proceedings of the Thirty-sixth Annual Conference of the Southwest Decision Sciences Institute, vol. 36, no. 1, March 3-5, 2005, Dallas, TX.
50. Segall, Richard S., "Data Mining of Microarray Databases for the Analysis of Environmental Factors on Corn and Maize," Proceedings of the 2005 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Central Arkansas, February 18, 2005, pp. 30-37.
51. Nonis, Sarath A., Guha, Gauri S., and Segall, Richard S., "Marketing Role in Creating Value in the Biotechnology Industry", 2004 Winters Educators Conference Proceedings: Marketing Theory and Applications, Volume 15, W.L. Cron and G.S. Low, editors.
52. Guha, Gauri S., Rose, Adam Z., Nonis, Sarath A., and Segall, Richard S., "An Input-Output Analysis of Biotech Impacts on the State of Arkansas", Proceedings of the Southwestern Society of Economists, Orlando, FL, March 2004.

53. Segall, Richard S., Guha, Gauri S. and Nonis, Sarath A., "Data Mining for Assessing the Impact of Environmental Stresses on Plant Geonomics, Proceedings of the Thirty-Fifth Annual Conference of the Southwest Decision Sciences Institute, Orlando, FL, March 3-6, 2004, pp. 23-31.
54. Guha, Gauri S., Nonis, Sarath A., Baral, Anil and Segall, Richard S., "The Potential of Biotechnology: Promises, Perils and Perplexities—A Survey of Impacts on Relevant Economic Sectors" Proceedings of the Allied Academies International Conference, Las Vegas, NV, October 15-18, 2003. *Recipients of "Distinguished Research Award" by Academy of Economics & Economic Education.*
55. Nonis, Sarath A., Guha, Gauri S., and Segall, R. S., "Relationship Between Consumer Knowledge and Attitude about Biotechnology and Their Purchase Behavior Intentions: Moderating Effects of Innate Consumer Innovativeness and Anxiety with Social Issues," Proceedings of the International Business and Economics Conference, Las Vegas, NV, October 6-10, 2003. *Recipients of "Best Paper Award."*
56. Segall, Richard S., "Some Applications of Angoss KnowledgeSEEKER IV and SAS Enterprise Miner for Course Instruction on Data Mining of Data Warehouses," Proceedings of the Thirty-Four Annual Conference of Southwest Decision Sciences Institute; Houston, TX, March 6-8, 2003.
57. Segall, Richard S. "A Tutorial on Data Mining and Data Warehouses and Some Applications of Angoss KnowledgeSEEKER IV and Visual Decisions In3D;" Proceedings of the Thirtieth Annual Meeting of International Business School Computing Association; Savannah, GA, July 14-17, 2002.
58. Segall, Richard S., "Some Applications of RightPoint DataCruncher for Data Mining of Data Warehouses;" Proceedings of the Thirty-Third Annual Conference of Southwest Decision Sciences Institute; St. Louis, MO, March 6-8, 2002.
59. Segall, Richard S., "Some Applications of Data Mining and Warehousing to a Medical Database and Neural Networks;" Proceedings of the Thirty-Second Conference of the Southwest Decision Sciences Institute; New Orleans, LA; February 28 – March 3, 2001.
60. Segall, Richard S. and Seydel, John, "The Impact of Telecommunications and Electronic Commerce on Electronic Data Interchange and Supply Chain Management in Northeast Arkansas;" Proceedings of the Thirty-First Conference of the Southwest Decision Sciences Institute; San Antonio, TX; March 15-18, 2000.
61. Segall, Richard S., Moeeni, Farhad, and Jaraiedi, Majid, "The Use of Information Technology in Hospitals;" Proceedings of the Thirty-First Conference of the Southwest Decision Sciences Institute; San Antonio, TX; March 15-18, 2000.
62. Segall, Richard S. and Seydel, John, "Supply Chain Management via Electronic Commerce;" Proceedings of the 3<sup>rd</sup> World Multiconference on Systemics, Cybernetics and Informatics and the 5<sup>th</sup> International Conference on Information Systems Analysis and Synthesis, Volume 8: Concepts and Applications of Systemics, Cybernetics and Informatics; Orlando, FL; July 31-August 4, 1999.
63. Segall, Richard S. and Hennessey, Kathleen A., "Designing a Curriculum for Distance Learning Programs in Medical Informatics;" Proceedings of the Association of Information Systems Americas Conference; Baltimore, MD; August 14-16, 1998.
64. Segall, Richard S. and Hennessey, Kathleen A., "A Survey of the Use of Telecommunications and Distance Learning in Medical Informatics Programs;" Proceedings of Association of Information Systems Americas Conference; Baltimore, MD; August 14-16, 1998.



65. Segall, Richard S., "Comparing Learning Rules of Neural Networks Using Computer Graphics;" Proceedings of the Twenty-seventh Annual Conference of the Southwest Decision Sciences Institute; San Antonio, TX; March 6–9, 1996.
66. Segall, Richard S., "Some Methods for Determining Capacities and Locations of Emergency Medical Facilities for Occupational Accidents;" Proceedings of the Tenth International Symposium on Mathematical Modelling and Scientific Computing Boston, MA; July 5–8, 1995; Also, in journal Mathematical Modelling and Scientific Computing, Vol. 6, 1996.
67. Segall, Richard S., "Determining the Capacities and Locations of Emergency Medical Facilities Providing Non-identical Services;" Proceedings of the Fourth Industrial Engineering Research Conference; Nashville, TN; May 24–25, 1995, pp. 1137–1143.
68. Segall, Richard S., "Simulation and Stochastic Modeling for the Spatial Allocation of Multi-Categorical Resources;" Proceedings of the Interface of Computing Science and Statistics; Reston, VA; April 1988.
69. Segall, Richard S. and Rising, Edward J., "The Application of Computer Technology for the Capacity Planning and Marketing of Hospitals;" Proceedings of 1987 International Business School Computer Users Group; Flint, MI; July 26–29, 1987.
70. Segall, Richard S.; Jaraiedi, Majid; Khalili, Parviz; and Asoudegi, Ehsan; "Computing Average Outgoing Quality of Single and Double Acceptance Sampling Plans When Incoming Quality is Random;" Proceedings of the 1986 Fall Industrial Engineering Conference; Boston, MA; December 7–10, 1986.
71. Segall, Richard S. and Rising, Edward J., "Some Strategies for Using an Origin Constrained Gravity Model for Decision Making of Hospital Capacity;" Proceedings of the Northeast American Institute for Decision Sciences; Williamsburg, VA; March 26–27, 1986.
72. Jaraiedi, Majid; Segall, Richard S.; and Asoudegi, Ehsan; "Effect of Random Variations in Incoming Quality on the Average Outgoing Quality of Acceptance Sampling Plans;" Proceedings of the Northeast American Institute for Decision Sciences; Williamsburg, VA; March 26–27, 1986.
73. Rising, Edward J. and Segall, Richard S., "The Calibration of an Origin Constrained Gravity Model to Predict Patient Flow," Proceedings of the Third International Conference on Systems Science in Health Care, July 16–20, 1984; Eds. W. van Eimeron, R. Engelbrecht, C. D. Fligel; Springer-Verlag; Berlin, Germany; pp. 1009–1012.
74. Rising, Edward J. and Segall, Richard S., "A Model of Patient Use of Hospitals in Massachusetts," Proceedings of Hospital Management Systems Society Annual Conference, San Francisco, CA; February 1984.

#### V. GRANTS AND CONTRACTS AND RESEARCH PROPOSALS

1. Segall, Richard S. Neil Griffin College of Business Summer 2024 Research Grant titled: "Writing of Manuscripts for Journal Submission in the areas of "Big Data", "Data Visualization" and "Advanced Data Mining" Topics that would enhance my teaching of courses in A-STATE Neil Griffin College of Business and useful for seeking external funding.  
*Awarded by Dean of Neil Griffin College of Business in amount of \$10,000.*
2. Segall, Richard S. (A-STATE), "Predictive Modeling of Chronic Disease Progression in Humans and Plants using Artificial Intelligence (AI), Data Mining, and Data Visualization Techniques,"  
*Seed Money Grant awarded from Arkansas Biosciences Institute (ABI) in the amount of \$28,463 for July 1, 2023–June 30, 2024.*

3. Completion of Book Writing and Editing to fulfil Contract Agreement with IGI Global for "A Handbook on Big Data Storage and Visualization Techniques" requesting \$5,000.  
*Approved for funding by the A-STATE College of Business Summer Research Grant Committee. (2017)*
4. Mukherjee, Arijit (UCA) and Segall, Richard S (ASU), "Investigating the formation of nodule-like structures in land plants", P3 (Plant Powered Production) Program Development Grant award from Arkansas Science and Technology Authority (ASTA), August 1, 2014-July 31, 2015, awarded \$75,000.
5. Completion of Book Writing and Editing to fulfill Contract Agreement with IGI Global for "Research and Applications of Global Supercomputing" proposal submitted to ASU College of Business Summer Research Grant Committee requesting \$7,500.  
*Approved for funding by the ASU College of Business Summer Research Grant Committee. (2014)*
6. "Data Mining for High Performance Computing" by Richard Segall and Shen Lu proposal submitted to National Center for Supercomputing Applications (NCSA) for use of National Science Foundation (NSF) funded XSEDE (Extreme Science and Engineering Discovery Environment) Supercomputers Lonestar and Stampede at Texas Advanced Computer Center (TACC) at University of Texas at Austin for September 30, 2013 to September 30, 2014.  
*Approved for "Start Up" Allocation Award by National Center for Supercomputing Applications (NCSA). (2013)*
7. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users, including 10 Sun resources and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2016).*
8. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users, including 10 Sun resources and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2015).*
9. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users, including 10 Sun resources and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2014).*
10. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users, including 10 Sun resources and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2013).*
11. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users, including 10 Sun resources and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2012)*
12. Hosted ORACLE E-Business Suite on ORACLE Corporation servers and software for 120 student licenses to College of Business at Arkansas State University, approved for funding for 2011-2012 in the amount of \$1,164,240 for software licenses and an undetermined amount for continuous use of servers located at ORACLE Corporation.  
*Approved for funding by ORACLE Corporation (2011)*

13. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users and technical support yielding a total commercial value of \$380,671.  
*Approved for funding by Oracle Corporation. (2011)*
14. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users and technical support yielding a total commercial value of \$1,098,090.  
*Approved for funding by Oracle Corporation. (2010)*
15. "Proposal for Funding Support of 2010 MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Conference" submitted to Director of Arkansas Bioscience Institute (ABI), Little Rock, AR  
*Approved for funding in the amount of \$2,000. (2010)*
16. "Visual Analytics of Data-Intensive Web, Text and Data Mining with Multiprocessor Supercomputing" (Request Number: ASC090064) by Qingzu Zhang and Richard Segall proposal submitted to National Center for Supercomputing Applications (NCSA) for use of Supercomputers: IBM e1350 (Big Red) at Indiana University, Sun Constellation Cluster (Ranger) and Sun Visualization System (Spur) at Texas Advanced Computer Center (TACC) at University of Texas at Austin.  
*Approved for Resource Award by National Center for Supercomputing Applications (NCSA) for 30,000 hours on "Big Red" 150,000 hours on "Ranger" and 20,000 hours on "Spur" with estimated value of \$200,000. (2009)*
17. Hosted ORACLE E-Business Suite on ORACLE Corporation servers and software for 120 student licenses to College of Business at Arkansas State University, approved for funding for 2009-2010 in the amount of \$1,163,740 for software licenses and an undetermined amount for continuous use of servers located at ORACLE Corporation.  
*Approved for funding by ORACLE Corporation. (2009)*
18. Oracle 11g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users and technical support yielding a total commercial value of \$493,920.  
*Approved for funding by Oracle Corporation. (2009)*
19. "A New Paradigm in Sustaining Information Quality through Automatic Identification" with Farhad Moeeni (PI), Richard Segall (Co-PI), John Seydel, John Talburt (PI at UALR), and Yupo Chan (Co-PI at UALR), requesting \$468,654 for 7/1/09-6/30/11 proposal submitted in December 2008 to National Science Foundation (NSF), Division of Information & Intelligent Systems (IIS).  
*Reviewed for funding by National Science Foundation (NSF) Division of IIS, but not funded. (2009)*
20. "Visual Analytics of Data-Intensive Web, Text and Data Mining with Multiprocessor Supercomputing" (with Dr. Quigyu Zhang) proposal submitted to ASU College of Business Summer Research Grant Committee requesting \$15,000.  
*Approved for funding by the ASU College of Business Summer Research Grant Committee. (2008)*
21. "Enabling Specialty Crop Deregulation with Software: a Prototype" proposal submitted to EPSCoR (Experimental Program to Simulate Competitive Research) P3 (Plant Powered Production) Center Collaborative Seed Grants Program with Daniel Berleant (UALR) [University of Arkansas-Little Rock], Elizabeth Hood (ASU), and Richard Segall (ASU) requesting \$91,571.  
  
*Approved for funding by Arkansas Sciences and Technology Authority (ASTA) as National Science Foundation (NSF) Grant Award # EPS-0701890. (2009)*

22. "A Prototype Program for Attaining Specialty Crop Non-Regulated Status" submitted to Arkansas Biosciences Institute (ABI) Institute-Wide Request for Collaborative Proposals, with Richard Segall (PI), Elizabeth Hood (Co-PI), Vibra Srivastava (Co-PI; UAF), and Daniel Berleant (Co-PI, UALR) requesting \$45,600 for 2009 and \$45,600 for 2010.  
*Reviewed by Arkansas Biosciences Institute (ABI), but not funded. (2008)*
23. *Hosted ORACLE E-Business Suite on ORACLE Corporation servers and software for 100 student licenses to College of Business at Arkansas State University, approved for funding for 2008-2009 in the amount of \$365,543 for software licenses and an undetermined amount for continuous use of servers located at ORACLE Corporation. Approved for funding by ORACLE Corporation. (2008)*
24. Oracle 10g Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academy Program requesting software licenses for 200 users and technical support yielding a total commercial value of \$1,775,820.  
*Approved for funding by Oracle Corporation. (2008)*
25. Segall, Richard S. and Zhang, Qingyu, "Further Continuation of Research on Applications of Web, Text, and Data Mining Techniques in Knowledge Discovery," Proposal submitted to ASU Faculty Research Fund in the amount of \$12,000 in February 2008.  
  
*Approved for funding in the amount of \$2,485 by Arkansas Biosciences Institute (ABI) and the Office of Research and Technology Transfer (ORTT) for travel expenses.*
26. "A Paradigm Shift in Data Cleansing Process through Automatic Identification" [Moeeni, F. (PI at ASU) & Segall, RS (Co-PI at ASU) with Talburt, J. (PI at UALR) and Chan, Y. (Co-PI at UALR)] Proposal requesting \$449,529 submitted in December 2007 to National Science Foundation (NSF) Division of Information & Intelligent Systems (IIS).  
*Reviewed for funding by National Science Foundation (NSF) Division of IIS, but not funded. (2008)*
27. Grant for Online Course Development at Arkansas State University (ASU) requesting funding for summer 2008 in the amount of \$3,500 by Office of Academic Affairs and Research (OAAR).  
*Approved for funding by ASU Office of Academic Affairs and Research (OAAR) (2007).*
28. *Hosted ORACLE E-Business Suite on ORACLE Corporation servers and software for 120 student licenses to College of Business at Arkansas State University approved for funding in 2007 for \$438,651 for software licenses and an undetermined amount for continuous use of servers located at ORACLE Corporation. Approved for funding by ORACLE Corporation (2007)*
29. "SAS and ORACLE Training: for SAS Enterprise Miner Version 5.2 and Preparation for ORACLE SQL Certification Exam" submitted to Horizon Institute of Technology requesting \$3,000.  
*Approved for funding from Horizon Institute of Technology (2007)*
30. "Course Development Mini Grant for SAS Text Miner for ASU College of Business", proposal submitted to SAS Institute Inc., Cary, NC, Software and site license for 6-month term for MIS 6773: Advanced Data Mining Course to be taught in Spring 2007 & Research. Exact amount unknown but estimated to be about \$75,000.  
*Approved for funding by SAS Institute Inc. (2006)*
31. "Further Continuation of Research on Application of Data Mining Techniques in Knowledge Discovery: an In-Depth Investigation on Algorithms and Heuristics (with Dr. Qingyu Zhang) proposal submitted to ASU College of Business Summer Research Grant Committee requesting \$20,000.  
*Approved for funding by the ASU College of Business Summer Research Grant Committee in the amount of \$15,000. (2006)*

32. "Continuation of Research on Applications of Modern Heuristics and Data Mining Techniques in Knowledge Discovery" (with Dr. Quigyu Zhang) proposal submitted to ASU College of Business Summer Research Grant Committee requesting \$20,000.

*Approved for funding by the ASU College of Business Summer Research Grant Committee. (2005)*

33. "Applications of Modern Heuristics and Data Mining Techniques in Knowledge Discovery" (with Dr. Quigyu Zhang) proposal submitted to ASU College of Business Summer Research Grant Committee requesting \$20,000.

*Approved for funding by the ASU College of Business Summer Research Grant Committee. (2004)*

34. Co-Investigator (Co-I) of "Biopharmaceuticals - Assessment of Economic and Environmental Issues" with Gauri Guha (Principal Investigator) and Sarath Nonis (Co-Principal Investigator) submitted to ASU Arkansas Biosciences Institute (ABI) requesting \$125,000 for January 1, 2003-December 31, 2003.

*Approved for funding by ASU Arkansas Biosciences Institute (ABI) for the amount of \$250,000 as a block grant with proposal "Social Assessment of Pharmaceuticals" submitted by Drs. Andrew Knight and Patrick Stewart "to encourage the development of a focus area in Social, Economic and Regulatory Studies."*

35. "Data Warehousing and Database Mining", proposal submitted to Horizon Institute of Technology (HIT) of Arkansas State University, requesting \$10,000. (2003)

*Approved for funding by Horizon Institute of Technology.*

36. ORACLE software of Financials and Customer Relationship Management (CRM) of E-Business Suite including site licenses and technical support for College of Business at Arkansas State University", yielding a total commercial value of multi-million dollars. (2002)  
*Approved for funding by ORACLE Corporation.*

37. SAS Software and site licenses for three-year period expiring December 31, 2004 for College of Business at Arkansas State University yielding a total commercial value of \$250,000. (2001)  
*Approved for funding by SAS Corporation.*

38. "Applications of Neural Networks, Data Mining and Warehousing to Artificial Intelligence and Sensor Array Pattern Recognition", submitted to National Research Council (NRC), Air Force/Summer Faculty Fellowship Program (AF/SFFP) requesting \$18,520. (2001)

*Approved for funding by the National Research Council.*

39. Oracle software of Oracle Marketing, Oracle Sales, Oracle Service, Oracle Call Center and Telephony (CCT), and Oracle E-Commerce Family from the Oracle Centers of Excellence for Customer Relationship Management (CRM), including site licenses, and technical support for College of Business at Arkansas State University yielding a total commercial value of \$4,760,519.85. (2001) *Approved for funding by Oracle Corporation.*

40. Oracle software of Oracle iStore and Oracle iPayment from the Oracle Center of Electronic Commerce; Oracle Data Mart Suite, Oracle Warehouse Builder, Oracle Darwin Deployment Pack, Oracle Express Server from the Oracle Academic Initiative (OAI) Program in Data Warehousing, including site licenses, and technical support for College of Business at Arkansas State University yielding a total commercial value of \$7,787,319.60. (2000)  
*Approved for funding by Oracle Corporation.*

41. Oracle 8i Enterprise Edition software and site licenses for College of Business at Arkansas State University with the Oracle Academic Initiative (OAI) Program requesting \$48,039.95 for software and \$10,560 for support yielding a total commercial value of \$58,599.95. (2000)

*Approved for funding by Oracle Corporation.*

42. IBM DB2 Universal Database Version 7.1 software and site licenses for College of Business at Arkansas State University yielding a total commercial value of \$1,784,900.00. (2000)

*Approved for funding from IBM.*

43. "The Use of Sun Microcomputers in the Information Systems Curriculum in the School of Business of a Historically Black College;" submitted to Sun Microsystems Computers Corporation, Palo Alto, CA, as an Academic Equipment Grant (AEG) requesting 25 Sun Microcomputer Workstations installed for the School of Business Microcomputer Laboratory at \$134,505 minus 36% educational rate. (1998) *Reviewed for funding by Sun Microsystems Corporation, but not funded.*

44. "Risk Assessment of Hazardous and Radioactive Material Transportation;" written jointly with International Center for Informatics Research (ICIR), College of Business Administration, Texas Tech University, Lubbock, TX, requesting \$146,566. (1997)

*Reviewed for funding by U.S. Department of Transportation (DOT), but not funded.*

45. "Modeling Air Force Logistic and Transportation Problems Using Genetic Algorithms and Large-Scale Optimization;" submitted to U. S. Air Force Office of Scientific Research (AFOSR) requesting \$94,738. (1996)

*Reviewed for funding by U.S. Air Force Office of Scientific Research (AFOSR), but not funded.*

46. "Optimal Design of Very Large-Scale Integrated Networks Using Integer Programming and Genetic Algorithms for Telecommunications and Logistics of the U.S. Air Force;" written jointly with Business Operations Analysis Branch (BOA) of AT&T Bell Laboratories, Somerset, NJ, and submitted to U.S. Air Force Office of Scientific Research (AFOSR) requesting \$304,600. (1995)

*Reviewed for funding by U.S. Air Force Office of Scientific Research (AFOSR), but not funded.*

47. "Plan of Continued Research on Mathematical Modelling for Predicting Inpatient Medical Care Needs and Associated Medical Costs due to Electromagnetic and Occupational Accidents Occurring in the Military Manpower of the U.S. Air Force;" submitted to National Research Council (NRC) and U.S. Air Force Laboratories (USAFL)/Occupational and Environmental Health Directorate (OEHD) requesting \$53,611. (1994)

*Approved for funding by NRC and U.S. Air Force Office of Scientific Research (AFOSR).*

48. "Optimization Modelling for Aircraft Design and Controlled Space Structures;" submitted to National Research Council (NRC) and National Aeronautics and Space Administration (NASA) Langley Research Center (LRC) requesting \$45,000. (1992)

*Reviewed for funding by National Research Council (NRC) (1992) but not funded.*

49. "Mathematical Modelling for Predicting Inpatient Medical Care Needs and Associated Medical Costs due to Electromagnetic and Occupational Accidents Occurring in the Military Manpower of the U.S. Air Force;" submitted to National Research Council (NRC) and U.S. Air Force Laboratories (USAFL)/Occupational and Environmental Health Directorate (OEHD) requesting \$51,650. (1992)

*Approved for funding by NRC and U.S. Air Force Office of Scientific Research (AFOSR).*

50. "Mathematical Modelling of Predicting Disease Prevalence and Associated Medical Costs in the Military Manpower of the U.S. Air Force" submitted to National Research Council (NRC) and US. Air Force Systems Command (AFSC)/U.S. Air Force School of Aerospace Medicine (USAFSAM) requesting \$40,000. (1991)
- Approved for funding by NRC, but funding was limited by USAFSAM.*
51. "Applications of Large-Scale Optimization for Evaluation of Aerodynamic Strength of Aircraft" submitted to National Research Council (NRC) and U.S. Air Force Systems Command (AFSC) requesting \$40,000. (1991). *Reviewed for funding but not funded.*
52. "Determination of Optimal Quality Targets Using Taguchi and Karmarkar Methodologies with an Application to the U.S. Navy;" submitted to Office of Naval Research (ONR) with M. Jaraiedi requesting \$84,000. (1991). *Reviewed for funding by ONR, but not funded.*
53. "Modelling of Utilization of Large-Scale Computer Systems;" submitted to American Society of Engineering Education (ASEE) and National Aeronautic and Space Administration (NASA) Lewis Research Center (LeRC) requesting \$5,600. (1986)
- Approved for funding by ASEE and NASA LeRC.*
54. "Marketing and Patient Flow Models for Hospitals;" submitted to National Center for Health Services Research (NCHSR) with E. J. Rising requesting \$141,108. (1986).
- Reviewed for funding by NCHSR, but not funded.*

VI. OTHER PUBLICATIONS: TECHNICAL REPORTS

1. Segall, Richard S. and Nonis, Sarath A., "Data Mining for Assessment of Environmental Stress on Plants - A Case Study using OSMID," Acxiom Data Engineering Laboratory Working Paper Series, Conference on Applied Research in Information Technology, February 27, 2004, Publication in Collaboration with University of Arkansas at Little Rock (UALR) Donaghey Cyber College.
2. Segall, Richard S., "Incorporating Data Mining and Computer Graphics for Modeling of Neural Networks," Acxiom Data Engineering Laboratory Working Paper Series, ADEL-WP-03-02, Publication in Collaboration with University of Arkansas at Little Rock (UALR) Donaghey Cyber College, 33 pages, March 2003.
3. Fish, Kelly E. and Segall, Richard S., "A Visual Analysis of Learning Rule Effects and Variable Importance for Neural Networks Employed in Data Mining Operations;" Acxiom Data Engineering Laboratory Working Paper Series, ADEL-WP-02-03, Publication in Collaboration with University of Arkansas at Little Rock (UALR) Donaghey Cyber College, 41 pages, March 2002.
4. Segall, Richard S., Final Report for U. S. Air Force Summer Faculty Fellowship (AF/SFFP): "Applications of Neural Networks, Data Mining and Warehousing to Artificial Intelligence and Sensor Array Pattern Recognition"; National Research Council (NRC), Washington, DC, August 2001; 59 pages.
5. Segall, Richard S. and Gleit, Alan, "Mathematical Models for Optimal Resource Allocations in Diagnostic Screening," Technical Report: Dept. of IE/OR; University of Massachusetts at Amherst, 1981.
6. Segall, Richard S. and Gleit, Alan, "Optimal Resource Allocation Models for Diagnostic Screening," Technical Report: Dept. of IE/OR; University of Massachusetts at Amherst, 1980.



7. A Computer Method for the Analysis of Variance of an Irregular Two Way Design, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978.
8. A Computer Method for the Calculation of Factor Effects of a 2<sup>n</sup>3<sup>m</sup> Factorial Experiment, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978.
9. A Computer Method for the Statistical Determination of Multiple Comparisons, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978.
10. A Computer Method for Time Series Model Identification, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978.
11. A Statistical Consultation for Test Data from the Mechanized Infantry Combat Vehicle (MICV), Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978. (41 pages)
12. A Computer Method for Bartlett's Tests for the Homogeneity of Variance, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978.
13. Miradcom Data Tape Processing: An Outline, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978. (33 pages)
14. An Analysis of Hit-Probabilities and Impact Coordinates from Stationary Day Firing of the Dragon Weapon System, Technical Memorandum, Infantry Weapons Systems Analysis Division, Aberdeen Proving Grounds, MD, 1978. (18 pages)

#### VII. NON-REFEREED PUBLICATIONS

1. Howell, M., Kodali, V., Kreinovach, V., Aboudja, H., Batthula, V.J. R., Segall, R. & Berleant, D., "The Space Race in History: The USSR Started Ahead but US Space Technology Advanced Faster", The Space Review: Essays and Commentary about the Final Frontier, December 2, 2019. Available at <https://www.thespacereview.com/article/3840/1>
2. Berleant, Daniel; Kodali, Venkat; Segall, Richard; Anoudja, Hyacithe, and Howell, Michael; Moore's Law, Wright's Law and the countdown to exponential space, The Space Review: Essays and Commentary about the Final Frontier, January 7, 2019. Available at <http://www.thespacereview.com/article/3632/1>
3. "How is Big Data a Part of Everyday Life? Hear More from the Experts Dr. Richard Segall and Jeffrey Cook", IGI Global Newsroom, Nov 8, 2018. Available at <https://www.igi-global.com/newsroom/archive/big-data-part-everyday-life/3967/>
4. Segall, Richard S. and Seydel, John, "Horizon Institute Funds Research Awards to 3 CoB Faculty," ASU College of Business Publication, Summer/Fall 2004, Number 9, page 7.
5. Segall, Richard S., "College Acquires 3-year SAS Grant," The Business Connection, ASU College of Business Publication, Spring/Summer 2002, Number 7, page 15.
6. Segall, Richard S., "College Acquires Technology Grants," The Business Connection, ASU College of Business Publication, Spring/Summer 2001, Number 5, page 5.

#### VIII. PAPERS PRESENTED

1. Duggirala, S., Aboudja, H., Batthula, V., Howell, M., Segall, R.S., Tsai, P-H, & Berleant, D., "Women in Space from Historical Trend to Future Forecasts", Oklahoma Academy of Science Annual Meeting, Oklahoma State University Health Science Center, Tulsa, OK, November 4, 2022.

2. Berleant, D., Aboudja, H., Batthula, V., Howell, M., Tsai-P-H. & Segall, R.S., "Moore's Law: Extensions to Exponential Increase in Lifetimes of Interplanetary Spacecraft", Southeast Symposium on Contemporary Engineering Topics (SSCET 2022), University of Arkansas at Little Rock, AR, September 16, 2022.
3. Segall, Richard S. and Sankarasubbu, Vidhya (2022), Investigating COVID-19 using Big Data Analytics and Visualization with Artificial Intelligence (AI) Techniques, MidSouth Computational Biology and Bioinformatics (MCBIOS) Virtual Conference, Breakout Session 8: Rapid Fire Session, April 26. Also #11 in Poster Session.
4. Tsai, P.-H., Berleant, D., Segall, R.S., Aboudja, H., Batthula, V.J.R., & Howell, M. (2021). Spacecraft for Deep Space Exploration: Combining Time and Budget to Model the Trend in Lifespan. Future Technologies Conference (FTC 2021) Virtual Broadcast from Vancouver, CANADA. Session 3: Computing, Presentation #26, October 22, 2021
5. Howell, Michael; Berleant, Daniel; Aboudja, Hyacinthe; Segall, Richard; Tsai, Peng-Hung. Is Technological Progress a Random Walk? Examining data from space travel. Arkansas Academy of Sciences 105<sup>th</sup> Annual Meeting (Virtual), April 9-10, 2021.  
<https://www.youtube.com/watch?v=TwFtty7XFvE>
6. Howell, Michael, Kodali, Venkat, Segall, Richard, Aboudja, Hyacinthe, Berleant, Daniel, "Moore's Law and Space Exploration: New Insights and Next Steps", Arkansas Academy of Sciences 103<sup>rd</sup> Annual Meeting, Hendrix College, Conway, AR, March 29-30, 2019.
7. Hahn, T., Wuttke, D., Marseca, P., Begum, N., Segall, R., Benes, H. and Tang, F., "Vacuolar Lipid Membrane, Autophagic and Metabolic Changes, Play Key Roles in the Progression of the Yeast's Aging Process", 25<sup>th</sup> Annual Southeastern Regional Yeast Meeting (SERYM 2018), Memphis, TN, March 9-11, 2018.
8. Hahn, T., Wuttke, D., Marseca, P., Segall, R. and Tang, F., "Uncovering Imperatively Hidden Objects (IHO) to complete Feature Selection in order to Enhance Accuracy and Predictive Power of Supervised Machine Learning (ML) Algorithms", MidSouth Computational Biology & Bioinformatics Society (MCBIOS-XV), Mississippi State University, Starkville, MS, March 29-31, 2018.
9. Duggurala, Ronithkumareddy; Kodali, Venkat; Segall, Richard; Berleant, Daniel; and Aboudja, Hyacinthe; Steps Toward Measuring World Space Exploration Activity, Arkansas Academy of Sciences, 102 Annual Meeting, A-STATE, Jonesboro, AR, April 7, 2018.
10. Segall, Richard S., "Using Tablets and Mobile Devices for Visual Analytics of Big Data in Bioinformatics, 14<sup>th</sup> Annual Meeting of Computational Biology and Bioinformatics Society (MCBIOS), Little Rock, AR, March 23-25, 2017.
11. Segall, Richard S., "Technologies for Teaching Big Data Analytics, 48<sup>th</sup> Southwest Decision Sciences Meeting (SWDSI), Little Rock, AR, March 8-11, 2017.
12. Segall, Richard S., "Energy Conservation and Economics by Assessing Water Quality of a Waste Treatment Plant", Fifth Annual Renewable Energy Conference, Arkansas State University, State University, October 14, 2016.
13. Rahman, Hidayat; Hahn, Thomas; and Segall, Richard; "Advanced Feature-Driven Disease Named Entity Recognition Using Conditional Random Field", 7<sup>th</sup> ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM BCB), Seattle, WA, October 2-5, 2016.

14. Rahman, Hidayat; Hahn, Thomas; and Segall, Richard; Biomedical Disease Name Entity Recognition: An Ensemble Approach, Poster presented at ACM Richard Tapia Celebration of Diversity in Computing Conference, Austin, TX, September 14-17, 2016.
15. Lu, Shen; Hahn, Thomas; and Segall, Richard; "Comparison of Data Mining Methods on Microarray Gene Expression Data on Cancer", Poster presented at ACM Richard Tapia Celebration of Diversity in Computing Conference, Austin, TX, September 14-17, 2016.
16. Hahn, Thomas; Rahman, Hidayat; and Segall, Richard; Free Remote Software to Better Integrate Disabled Students into Mainstream Education, Lighting Talk, Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT) Conference, Atlanta, GA, August 11-13, 2016.
17. Rahman, Hidayat; Hahn, Thomas; and Segall, Richard; Disease Named Entity Recognition Using NCBI Corpus, International Conference on Biological Ontology & BioCreative, Corvallis, OR, August 1-4, 2016.
18. Rahman, Hidayat; Hahn, Thomas; and Segall, Richard; Biomedical Disease Name Entity Recognition: Poster presented at EXtreme Science and Engineering Discovery Environment (XSEDE), Miami, FL, July 17-21, 2016.
19. Hahn, Thomas; Lu, Shen and Segall, Richard; "Comparison of Data Mining Methods on Microarray Gene Expression Data on Cancer", Poster presented at EXtreme Science and Engineering Discovery Environment (XSEDE), Miami, FL, July 17-21, 2016.
20. Segall, Richard, "High Performance Computing and Data Mining in Bioinformatics"; FedEx Institute of Technology, 13<sup>th</sup> Annual Meeting of MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Memphis, TN, March 3-5, 2016.
21. Hahn, Thomas, Segall, Richard; Benes, Helen and Tang, Fusheng; "Regulation of Sterol Transport in Repsones to Aging in *Saccharomyces Cerevisiae*", Poster at 13th Annual Meeting of MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Memphis, TN, March 3-5, 2016.
22. Lu, Shen and Segall, Richard; "Linkage Discovery by Combining Latent Semantic Analysis and Bayesian Segmentation with Glossaries", Poster at 8<sup>th</sup> Annual Graduate Student Research Symposium, University of South Florida, Tampa, FL, March 28, 2016.
23. Hahn, Thomas; Segall, Richard; Benes, Helen and Tang, Fusheng; Vacuoles relieve Reactive Oxygen Species Stress and Extend The Lifespan, Aging Conference 2016 organized by EuroSciCon. February 9-11, 2016, London, UK, February 9-11, 2016.
24. Hahn, Thomas; Segall, Richard; Benes, Helen and Tang, Fusheng; Regulation of Sterol Transport in Response to Aging, Leibniz-Institute for Age Research - Fritz Lipmann Institute organized by the German Association for Aging Research (DGfA), Jena, Germany, December 4-5, 2015.
25. Lu, Shen; Segall, Richard and Hahn, Thomas; "Comparison of Data Mining Methods on Microarray Gene Expression Data on Cancer", Poster presentation at Extreme Science and Engineering Discovery Environment (XSEDE), St. Louis, MO, July 26-30, 2015.
26. Mukherjee, Arijit (UCA) and Richard Segall (ASU), "Investigating the formation of nodule-like structures in land plants"; Oral Presentation at Arkansas P3 (Plant Powered Production) Annual Research Symposium, Fayetteville, AR, July 1, 2015.

27. Hiltenbrand, R., McCarthy, H., Thomas, J., Dykema, K., Zimulinda, D., Spurr, A, Segall, R., Winn, M., Mukherjee, A., Poster Presentation "Investigating the formation of nodule-like structures in land plants"; Presentation at Arkansas P3 (Plant Powered Production) Annual Research Symposium, Fayetteville, AR, July 1, 2015.
28. McCarthy, Hannah; Thomas, Jackie; Dykema, Karl; Zimulinda, David; Spurr, Ashley; Segall, Richard; Winn, Mary; Mukherjee, Arijit; "Investigating the formation of nodule-like structures in land plants", Poster presentation at Arkansas P3 (Plant Powered Production) Annual Research Symposium, Poster Abstract #8, Fayetteville, AR, June 29-July 1, 2015.
29. Hahn, Thomas; Segall, Richard S., Teng, Fusheng, and Benes, Helen "Discovering mechanisms of rejuvenation and life extension from yeast microarray data using computational methods" presentation at 12<sup>th</sup> Annual Meeting of MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Little Rock, AR, March 14-15, 2015.
30. Segall, Richard S.; Pippinger, Nickolas; Berleant, Daniel; Eversole, Kellye; Mustell, Robert; Vicuna-Requesens, Deborah; Biedenbender, Christopher, and Hood, Elizabeth, "Information Quality Methods and Extraction of Numerical Information from a Corpus of Scientific Papers Related to Corn" presentation at 12<sup>th</sup> Annual Meeting of MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Little Rock, AR, March 14-15, 2015.
31. Mukherjee, Arijit and Segall, Richard S. "Using next generation sequencing technologies and big data analyses to investigate the transcriptomic responses during formation of nodule like structures in land plants" poster presentation at 12<sup>th</sup> Annual Meeting of MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Little Rock, AR, March 14-15, 2015.
32. Hahn, Thomas; Segall, Richard; Benes, Helen and Tang, Fusheng; Vacuoles relieve reactive oxygen species stress and extend lifespan, Drug Discovery and Development Colloquium, University of Arkansas at Little Rock (UALR) & University of Arkansas Medical Science (UAMS), Little Rock, AR, June 20-21, 2015.
33. Hahn, Thomas; Segall, Richard; Benes, Helen and Tang, Fusheng; Multiple Sequence Alignment Tool, NIH, NIGMS Fifth Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington, DC, June 16-18, 2014.
34. Gupta, Neha; Hahn, Thomas; Balakrishnan, Prasanna and Segall, Richard S., "Biomedical Text Mining Using Large-Scale Distribution Machine Learning Algorithms", Poster at MidSouth Computational Biology and Bioinformatics Society (MCBIOS XI) Conference, Oklahoma State University, Stillwater, OK, March 7-8, 2014.
35. Segall, Richard S., "Data, Text and Web Mining in Bioinformatics and Micro-Array Databases", Next Gen Sequencing/Bioinformatics Cluster, Arkansas P3 Center Annual Research Symposium, Little Rock, AR, April 8-9, 2013.
36. Lu, Shen, Hahn, Thomas and Segall, Richard S., "Data Mining on Survival Prediction after Chemotherapy for Diffuse Large B-Cell Lymphoma", Poster presented at Joint Meeting of the Southern Section of the American Society of Plant Biologists (ASPB) and P3 Symposium, Little Rock, AR, April 6-9, 2013.
37. Lu, Shen, Segall, Richard S. and Hahn, Thomas, "Comparison of Data Mining Methods on Microarray Gene Expression Data on Cancer", Poster presented at MidSouth Computational Biology & Bioinformatics Society Conference (MCBIOS X), Columbia, MO, April 5-6, 2013, p. 82 Abstract

38. Segall, Richard S., "Technology in Classroom Teaching in Colleges of Business and Engineering", Global Teaching Conference, Arkansas State University, Jonesboro, AR, March 27, 2013.
39. Lu, Shen, Segall, Richard S. and Hahn, Thomas, "Comparison of Data Mining Methods on Microarray Gene Expression Data on Cancer", Poster presented at the National Science Foundation (NSF) Bioinformatics Workshop to Foster Collaborative Research, Little Rock, AR, March 3-5, 2013.
40. Lu, Shen, Segall, Richard S. and Hahn, Thomas, "Linkage Discovery with Glossaries and Topic Segmentation", Poster presented at the National Science Foundation (NSF) Bioinformatics Workshop to Foster Collaborative Research, Little Rock, AR, March 3-5, 2013. *Poster Award: 3<sup>rd</sup> Place, Faculty/Staff, Computational Division.*
41. Lu, Shen and Segall, Richard S., "Linkage Discovery by Combining Latent Semantic Analysis with Glossaries from Biosciences Domains", Poster Presentation at 2012 Arkansas NSF EPSCoR Annual Meeting, Springdale, AR; August 13-14, 2012.
42. Lu, Shen and Segall, Richard S., "Multi-SOM: an Algorithm for High-Dimensional Small Size Datasets", 16<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2012, Orlando, FL, July 17-July 20, 2012
43. Lu, Shen and Segall, Richard S., "E-Book Reader: A Software Tool for Knowledge Discovery from Bioinformatics Proceedings", AR P3 Center Annual Symposium 2012 & the 3<sup>rd</sup> Annual Conference of the American Council for Medicinally Active Plants (ACMAP), Poster Presentation, May 22-25, 2012.
44. Lu, Shen and Segall, Richard S., "E-Book Reader: A Software Tool for Knowledge Discovery from Bioinformatics Proceedings", Poster Presentation & Abstract at 9<sup>th</sup> MidSouth Computational Biology and Informatics Society (MCBIOS) Annual Conference, Oxford, MS; February 17-18, 2012.
45. Lu, Shen, Segall, Richard S. and Belford, Robert E., "Linkage Discovery within Symposium Proceedings", 6<sup>th</sup> BioNanoTox and Applications Research Conference, Little Rock, AR, November 17-18, 2011.
46. Lu, Shen and Segall, Richard S., "Statistical Quality Control of Microarray Gene Expression Data", 15<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2011), Orlando, FL, July 19-July 12, 2011.
47. Lu, Shen and Segall, Richard S., "Linkage in Medical Records and Bioinformatics Data", 2011 MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Meeting, College Station, TX April 1-2, 2011.
48. Lu, Shen and Segall, Richard S., "Data Quality Control and Segmentation for Bioinformatics", Arkansas P3 (Plant Powered Production) Symposium & Arkansas National Science Foundation (NSF) EPSCoR (Experimental Program to Simulate Competitive Research) Annual Meeting, Heber Spring, AR, July 26-28, 2011.
49. Berleant, D. Segall, R, Hood, E., Eversole, K., Vicuna, D., Atiff, S., Biedenbender, C., Pamarthi, J, and Pippenger, N., Enabling Crop Deregulation with Software: a Prototype, Arkansas P3 Symposium, Winthrop Rockefeller Institute, Pete Jean Mountain, AR, August 17, 2010.
50. Vicuna-Requesens, Deborah V., Eversole, Kellye A., Mustell, Robert A., Segall, Richard S., Berleant, Daniel, Hood, Elizabeth, "Establishing a Baseline Database to Demonstrate Substantial Equivalence of GE and non-GE crops through Data Mining and Text Mining", Poster #36, Arkansas P3 Symposium, Winthrop Rockefeller Institute, Pete Jean Mountain, AR, August 15-17, 2010.

51. Atiff, Samin and Segall, Richard S., "Use of SAS Text Miner in Bioinformatics", Poster #11, Arkansas P3 Symposium, Winthrop Rockefeller Institute, Pete Jean Mountain, AR, August 15-17, 2010.
52. Segall, Richard S., Zhang, Qingyu, and Pierce, Ryan, "Data Mining Supercomputing with SAS JMP® Genomics", 14<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2010), Orlando, FL, June 29-July 2, 2010.
53. Atiff, Samin and Segall, Richard S., "Use of SAS Text Miner in Bioinformatics", Poster Presentation at MidSouth Computational Biology and Informatics Society (MCBIOS) Annual Conference, Arkansas State University, Jonesboro, AR, February 19-20, 2010.
54. Segall, Richard S. and Zhang, Qingyu, "Data Mining and Visualization of Mouse Genome Data," 13<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2009), Orlando, FL, July 12, 2009.
55. Segall, Richard S. and Pierce, Ryan M., "Advanced Data Mining of Leukemia Cell Micro-Arrays", 13<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2009), Orlando, FL, July 12, 2009.
56. Segall, Richard S. and Qingyu Zhang, "Data Mining of Forest Cover and Human Lung Micro-array Databases for Bioinformatics", Poster Session at Arkansas EPSCoR (Experimental Program to Simulate Competitive Research) P3 (Plant-Powered Production) Conference, Winthrop Rockefeller Institute of University of Arkansas System, Petit Jean Mountain, AR, August 20-22, 2008.
57. Segall, Richard S. and Zhang, Qingyu, "Web Mining of Hotel Customer Survey Data", 12<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2008), Orlando, FL, June 30, 2008.
58. Segall, Richard S. and Zhang, Qingyu, "Web Mining for Analyzing Customer Survey and Marketing Campaign Data" 2008 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Central Arkansas (UCA), Conway, AR, March 14, 2008. [Peer-reviewed invited presentation]
59. Segall, Richard S. and Zhang, Qingyu, "Teaching Web Mining in the Classroom: with an Overview of Web Usage Mining," Thirty-ninth Annual Conference of the Southwest Decision Sciences Institute, vol. 39, no. 1, Houston, TX, March 6, 2008.
60. Segall, Richard S. and Zhang, Qingyu, "Data Mining of Forest Cover and Human Lung Micro-Array Databases for Bioinformatics", Poster Session at Arkansas Bioinformatics Symposium (ARBIOS), Arkansas State University (ASU), April 19, 2007.
61. Segall, Richard S. and Zhang, Qingyu, "Data Visualization and Data Mining of Micro-Array Databases for Biotechnology", 2006 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Central Arkansas (UCA), March 3, 2006.
62. Segall, Richard S. and Zhang, Qingyu, "Applications of Neural Network and Genetic Algorithm Data Mining Techniques in Bioinformatics Knowledge Discovery - A Preliminary Study", Thirty-seventh Annual Conference of the Southwest Decision Sciences Institute, Oklahoma City, OK, March 3, 2006.
63. Segall, Richard S., "Teaching Data Mining is NOT Teaching Statistics," ASU College of Business Teaching Conference: Improving Teaching and Learning Advances in Higher Education, Jonesboro, AR, April 6, 2006.

64. Segall, Richard S., "Data Mining of Microarray Databases for the Analysis of Environmental Factors on Plants Using Cluster Analysis and Predictive Regression", Annual Conference of the Southwest Decision Sciences Institute, Dallas, TX, March 4, 2005.
65. Segall, Richard S., "Data Mining of Microarray Databases for the Analysis of Environmental Factors on Corn and Maize," 2005 Conference of Applied Research in Information Technology, sponsored by Acxiom Laboratory for Applied Research (ALAR), University of Central Arkansas (UCA), February 18, 2005.
66. Guha, Gauri S., Rose, Adam Z., Nonis, Sarath A., and Segall, Richard S., "An Input-Output Analysis of Biotech Impacts on the State of Arkansas", Southwestern Society of Economists, Orlando, FL, March 5, 2004.
67. Segall, Richard S., Guha, Gauri S. and Nonis, Sarath A., "Data Mining for Assessing the Impact of Environmental Stresses on Plant Geonomics", Thirty-Fifth Annual Conference of the Southwest Decision Sciences Institute, March 5, 2004.
68. Segall, Richard S. and Nonis, Sarath A., "Data Mining for Assessment of Environmental Stress on Plants - A Case Study using OSMID," Conference on Applied Research in Information Technology sponsored by Acxiom Corporation at University of Arkansas at Little Rock (UALR), February 27, 2004.
69. Guha, Gauri S., Nonis, Sarath A., Baral, Anil and Segall, Richard S., "The Potential of Biotechnology: Promises, Perils and Perplexities - A Survey of Impacts on Relevant Economic Sectors" Allied Academies International Conference, Las Vegas, NV, October 15-18, 2003. *Recipients of "Distinguished Research Award" by the Academy of Economics and Economic Education.*
70. Nonis, Sarath A., Guha, Gauri S., and Segall, R. S., "Relationship Between Consumer Knowledge and Attitude about Biotechnology and Their Purchase Behavior Intentions: Moderating Effects of Innate Consumer Innovativeness and Anxiety with Social Issues," International Business and Economics Conference, Las Vegas, NV, October 6-10, 2003. *Recipients of "Best Paper Award."*
71. Segall, Richard S., "Some Applications of Angoss KnowledgeSEEKER IV and SAS Enterprise Miner for Course Instruction on Data Mining of Data Warehouses," Thirty-Fourth Annual Conference of Southwest Decision Sciences Institute; Houston, TX, March 6, 2003.
72. Segall, Richard S., "Incorporating Data Mining and Computer Graphics for Modeling of Neural Networks", Conference on Applied Research in Data Engineering sponsored by Acxiom Corporation at University of Arkansas at Little Rock (UALR), November 1, 2002.
73. Fish, Kelly E. and Segall, Richard S., "A Visual Analysis of Learning Rule Effects and Variable Importance for Neural Networks Employed in Data Mining Operations"; Conference on Applied Research in Data Engineering sponsored by Acxiom Corporation at University of Arkansas at Little Rock (UALR), November 9, 2001
74. Segall, Richard S., and Albanese, Richard A., "Mathematical Modeling and Computation for Determination of Optimum Geographical Locations of Emergency Medical Facilities"; Third Society of Industrial and Applied Mathematics Conference on Mathematical and Computational Issues in the Geosciences; San Antonio, TX; February 8-10, 1995.
75. Segall, Richard S., "Optimization Modelling for Neural Networks and Mathematical Biology"; Fourth Society for Industrial and Applied Mathematics Conference on Optimization; Chicago, IL; May 11-13, 1992.



76. Segall, Richard S., Copeland, Arthur H., Ringo, Chris D., and Moore, III, Berrien, "Mathematical Modelling for Oceans"; Operations Research Society of America National Meeting; Nashville, TN; May 12–15, 1991.
77. Segall, Richard S., Copeland, Arthur H., Ringo, Chris D., and Moore, III, Berrien, "Mathematical Modelling of Singular Value Decomposition Problems for Oceans"; International Conference on Industrial and Applied Mathematics; Washington, DC; July 8–12, 1991.
78. Segall, Richard S., Copeland, Arthur H., Ringo, Chris D., and Moore, III, Berrien, "Dynamical Systems for Inverse Ocean Modelling"; Society for Industrial and Applied Mathematics Conference on Dynamical Systems; Orlando, FL; May 7–10, 1990.
79. Segall, Richard S., "Solving Bi-level Geometric Programming Problems by Branch and Bound"; Third Society for Industrial and Applied Mathematics Conference on Optimization; Boston, MA; April 3–5, 1989.
80. Segall, Richard S., "Bi-level Geometric Programming"; Northeastern Mathematical Association of America Meeting; Providence, RI; November 18–19, 1988.
81. Segall, Richard S., "A Stochastic Multi-Category Spatial Resource Allocation Model for Large Scale Systems"; Northeastern Mathematical Association of America Meeting; Winooski, VT; June 10–11, 1988.
82. Segall, Richard S., "Some Results of Data Perturbations on Large Scale Mathematical Programming Models as Applied to Massachusetts Hospital Discharge Data"; Tenth Symposium on Mathematical Programming with Data Perturbations; Washington, DC; May 26–27, 1988.
83. Segall, Richard S., "Some Nonlinear Optimization Model for Planning of Large Scale Systems", Event MD37.5, Operations Research Society of America National Meeting; Washington, DC; April 1988.
84. Segall, Richard S., "Some New Research Directions for Optimization Problems with Multiple Objectives"; Northeastern Mathematical Association of America Meeting; Waltham, MA; November 20–21, 1987.
85. Segall, Richard S., "Mathematical Programming for the Optimization of Objectives of Health Care Systems"; Northeastern Mathematical Association of America Meeting; New London, CT; June 11–12, 1987.
86. Segall, Richard S., "Forecasting User Requirements for Coherent Computer Systems"; The Seventh International Symposium on Forecasting; Boston, MA; May 26–29, 1987.
87. Segall, Richard S., and Rising, Edward J., "A Model for Forecasting Hospital Bed Requirements"; The Seventh International Symposium on Forecasting; Boston, MA; May 26–29, 1987.
88. White, John R., Segall, Richard S., and Bibeau, Donna, "Numerical Optimization Methods in Nuclear Fuel Management", Society for Industrial and Applied Mathematics National Meeting; Boston, MA; July 21–25, 1986.
89. Segall, R. S., Rising, E. J., Abrahamson, P. C., and Sonderman, D. C., "Mathematical Modeling of Patient Travel and Use of Hospitals in Massachusetts", Event MB 19.4, Operations Research Society of America National Meeting; Orlando, FL; November 1983.

90. Segall, R. S., Abrahamson, P. G., Rising, E. J., and Sonderman, D. C., "Models of Area Wide Medical Care Delivery", Event WA21.1, Operations Research Society of America National Meeting; San Diego, CA; October 1982.

#### IX. SCHOLARLY PRESENTATIONS TO ORGANIZATIONS AND ACADEMIC DEPARTMENTS

1. Segall, Richard S., "Big Data", Arkansas State University, Neil Griffin College of Business Research Seminar Series, March 9, 2022.
2. Segall, Richard S., "Research and Applications in Global Supercomputing," Presentation at A-STATE College of Business Research Seminar Series, October 1, 2014.
3. Segall, Richard S., "Data Mining of Micro-array Databases for Bioinformatics and Environmental Stress Tolerances for Plants", Arkansas Biosciences Institute (ABI) Lecture Series, ASU-Jonesboro, April 2, 2008.
4. Segall, Richard S. and Zhang, Qingyu, "Data Mining of Micro-Array Databases for Bioinformatics with Four-Selected Software," Department of Computer & Information Technology Teaching/Research Seminar Series, Arkansas State University College of Business, Jonesboro, AR, October 11, 2006.
5. Segall, Richard S., "Data Mining of Micro-Array Databases for Biotechnology", R & R in the Bioinformatics World, Arkansas Biosciences Institute (ABI) Lecture Series, ASU, October 19, 2005.
6. "Mathematical Models of Health Care Systems", AT & T Bell Seminar Series, Georgia Institute of Technology, School of Industrial and Systems Engineering, March 1994.
7. "Mathematical Models of Health Care Systems", Brooks AFB, TX, School of Aerospace Medicine Seminar Series, San Antonio, TX, August 1993.
8. "Combinatorial Optimization - Graph Theoretic Optimization Problems", University of Louisville, Department of Mathematics Seminar Series, February 1991.
9. "The Mathematics of Optimization: Beyond Karmarkar: Interior Point Algorithms", University of Louisville, Department of Mathematics Seminar Series, October 1990.
10. "The Mathematics of Optimization: Karmarkar's Superconvergence Beats Watermelons", University of Louisville, Department of Mathematics Seminar Series, October 1990.
11. "The Mathematics of Optimization: Kachican's Ellipsoid Algorithm", University of Louisville, Department of Mathematics Seminar Series, October 1990.
12. "Superlinear Convergent Optimization Methods", University of New Hampshire, Department of Mathematics Seminar Series, March 1990.

#### X. PLENARY KEYNOTE ADDRESSES:

1. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Image Processing, Computer Vision, Data Visualization, and Data Mining for Transdisciplinary Visual Communication: What are the differences and which should or could you use?", 28<sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI 2024), September 10, 2024.
2. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled "Transdisciplinary applications of data visualization and mining techniques as representatively used for human diseases and plant pathology", 15th International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2024), March 26, 2024.

3. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "What is ChatGPT and its Present and Future for Artificial Intelligence in Trans-Disciplinary Communications?", 27<sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI 2023), September 13, 2023.

4. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Using Artificial Intelligence and Data Visualization for Current Interdisciplinary Applications: including Business, Urban, Biomedical and Other", 26<sup>th</sup> World Multi-Conference on Systemic, Cybernetics and Informatics (WMSCI 2022), July 13, 2022.

5. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Recent Advances for Using Artificial Intelligence for COVID-19 and Other Interdisciplinary Applications", 13<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics titled (IMCIC 2022), March 8, 2022.

6. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Advances made in 2021 using Artificial Intelligence for overcoming COVID-19", 25<sup>th</sup> Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2021), July 19, 2021.

7. *Invited Virtual Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled "Applications of Artificial Intelligence to COVID-19", 24<sup>th</sup> Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2020), September 13-16, 2020.

8. *Invited Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Big Data: A Treasure Chest for Interdisciplinary Research", 20<sup>th</sup> Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2016), July 5-8, 2016, Orlando, Florida, USA. Video at URL <http://www.iiis.org/ViewVideo2016.asp?id=14>

9. *Invited Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Research and Applications in Global Supercomputing: An Interdisciplinary Science", 18<sup>th</sup> Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2014), July 15-18, 2014, Orlando, Florida, USA.

Recorded Video and PowerPoint slides available at: <http://www.iiis.org/ViewVideo2014.asp?id=10>

10. *Invited Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Dimensionalities of Computation: From Global Supercomputing to Data, Text and Web Mining, 17<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2013), Orlando, FL, July 9-12, 2013. Recorded Video posted on web at: <http://www.iiis.org/ViewVideo2013.asp?id=14>  
Posted on YouTube at URL: <http://www.youtube.com/watch?v=8S4aiEyvqe8>

11. *Invited Plenary Address at International Institute of Informatics and Systemics (IIIS) Conference* titled: "Dimensionalities of Knowledge Discovery using Data, Text and Web Mining", 16<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2012), Orlando, FL, July 17-20, 2012. Recorded Video posted on web at: <http://iiisummer2012.wordpress.com/2012/07/31/dimensionalities-of-knowledge-discovery-using-data-text-and-web-mining/> and also on YouTube at URL: <http://www.youtube.com/watch?v=m9Azr025dA>

#### XI. TELEVISION & WEBINAR APPEARANCES:

1. "How Does Big Data Affect You? A Look into the Process that Drives Everyone's Decisions", *IGI Global Webinar Series*, November 14, 2018. Available at <https://www.igi-global.com/symposium/> and also at <https://www.youtube.com/watch?v=O2klyCpJE6I>

2. February 19, 2010, KAIT8 TV, Jonesboro, AR, "10:00PM News" hosted by Lauren Payne and Craig Rickert: MidSouth Computational Biology and Bioinformatics Conference at Arkansas State University.

3. February 19, 2010, KAIT8 TV, Jonesboro, AR, "5:00PM News" hosted by Dianna Davis: MidSouth Computational Biology and Bioinformatics Conference at Arkansas State University.
4. January 20, 2010, KAIT8 TV Jonesboro, AR, "Midday News" hosted by Dianna Davis with Jeffrey Cook: MidSouth Computational Biology and Bioinformatics Conference at Arkansas State University.
5. January 15, 2010 to February 19, 2010, Suddenlink TV Channel 14 Hourly Advertisements of MidSouth Computational Biology and Bioinformatics Conference to be held at Arkansas State University.
6. April 19, 2001, KAIT8 TV, Jonesboro, AR, "5:00PM News" hosted by Dianna Davis: ASU Receives ORACLE Grant

## **XII. PATENT APPLICATIONS:**

1. US Patent Application Publication [US 2011/0224933 A1]; "Method and System for Data Collection and Analysis to Assist in Facilitating Regulatory Approval of a Product" (Hood, EE; Eversole, KA; Berleant, JD; Segall, RS; Mustell, RA; and Requesens, DV); Patent Number 13/019,083.

## **XIII. HONARY SOCIETY APPOINTMENTS**

1. INTER-DISCIPLINARY FELLOW (IDF) of the International Institute of Informatics and Systemics (IIIS). Appointed 2019.

### **Professional Activities:**

#### **Membership in Professional Organizations:**

1. Association for Computing Machinery (ACM)
  - Special Interest Group on Artificial Intelligence
  - Special Interest Group on Knowledge Discovery and Data Mining
  - Special Interest Group on Management of Data
  - Special Interest Group on Management Information Systems
2. Association of Information Systems (AIS)
3. American Society of Engineering Education (ASEE)
4. Decision Sciences Institute (DSI)
5. Institute for Operations Research and the Management Sciences (INFORMS)
  - Artificial Intelligence Section
  - Data Mining Section
  - Decision Analysis Section
  - eBusiness Section
  - Health Applications Section
  - Information Systems Society
  - Location Analysis Section
  - Military Application Section
  - Spreadsheet Productivity Research Interest Group
  - Technology Management Section
  - Telecommunications Section
  - Transportation Science and Logistics Section
6. Institute of Electrical & Electronics Engineers (IEEE) Computer Society
7. Institute of Industrial & Systems Engineers (IISE)
  - Artificial Intelligence Interest Group
  - Data Analytics & Information Division
  - Operations Research Division
  - Process Industries Interest Group
  - Quality Control & Reliability Division
  - Society for Engineering & Management Systems (SEMS)
  - Society for Health Systems
8. International Society of Computational Biology (ISCB); 2011-Present.

9. The BioNanoTox International Society, 2011 to Present.
10. International Institute of Informatics and Cybernetics (IIIS), 2008 to Present.
11. ORACLE Academy

**Editorial Board Appointments of Refereed Journals:**

1. *International Journal of Fog Computing (IJFC)*, IGI Global, 2023 to Present.
2. *BOHR International Journal of Computational Intelligence and Communication Network (BIJCICN)*, 2022 to 2024.
3. Editorial Board of *Journal of Systemics Cybernetics & Informatics (JSCI)* "Special Issue on "Trans-Disciplinary Communication", Published May 2022. <http://www.iiisci.org/journal/sci/EdBoard.asp>
4. *Journal of Healthcare Engineering*, Guest Editor of Special Issue: "Big Data Analytics-as-a-Service: Architecture, Algorithms, and Applications in Health Informatics", Appointed 2017.
5. *International Journal of Data Science (IJDS)*, Inderscience Publishers Ltd., 2013 to Present.
6. *International Journal of Data Mining, Modelling and Management (IJDMMM)*, Inderscience Publishers Ltd., 2008 to Present.
7. *Journal of Systems, Cybernetics and Informatics (JSCI)*. Editorial Advisory Board, 2015 to Present. Editorial Board of Special Issue on "Trans-Disciplinary Communication". Appointed 2021.
8. *The Open Cybernetics and Systemics Journal*, Bentham Science Publishers, Ltd., 2008-2016.
9. *The Open Medical Informatics Journal*, Bentham Science Publishers, Ltd., 2008-2016.
10. *The Open Bioinformatics Journal*, Bentham Science Publishers, Ltd., 2009-2012.
11. *Proceedings of MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Conference, Special Issue of BMC Bioinformatics*, Appointed 2010.

**Professional Service on International Committees & Appointments:**

1. Program Committee of the 28<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2024), September 10-13, 2024.
2. Program Committee of the 27<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2023), September 12-15, 2023.
3. Program Committee of the 26<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2022), July 12-15, 2022.
4. Program Committee of the 25<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2021), July 18-21, 2021.
5. Program Committee of the 24<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2020), September 13-16, 2020.
6. Program Committee of the 23<sup>rd</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2019), July 6-9, 2019, Orlando, FL
7. Reviewer for the 10<sup>th</sup> International Multi-Conference on Complexity, Informatics and Cybernetics: (IMCIC 2019), March 12 - 15, 2019, Orlando, FL and WMSCI 2019, July 6-9, 2019, Orlando, FL.
8. Organizing Committee of the first workshop on "Big data analytics-as-a-Service: Architecture, Algorithms, and Applications in Health Informatics", Association of Computing Machinery (ACM) KDD (Knowledge Discovery in Data) 2017 Conference, August 14-17, 2017, Halifax, Nova Scotia, CANADA
9. Panelist of Panel: "Challenges and Future Directions", at first workshop on "Big data analytics-as-a-Service: Architecture, Algorithms, and Applications in Health Informatics", Association of Computing Machinery (ACM) KDD (Knowledge Discovery in Data) 2017 Conference, August 14-17, 2017, Halifax, Nova Scotia, CANADA
10. Program Committee of the 22<sup>nd</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2018), July 8-11, 2018, Orlando, FL
11. Program Committee of the 21<sup>st</sup> World Multi-Conference on Systemics, Cybernetics and Informatics: (WMSCI 2017), July 8-11, 2017, Orlando, FL
12. Co-Chair of Session "Bio-Medical and Applications of Informatics and Cybernetics in Science and Engineering", 20<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2016), July 5-8, 2016, Orlando, FL
13. Program Committee of the 18<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2014), July 15-July 18, 2014, Orlando, FL
14. Program Committee of the 17<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2013), July 9-July 12, 2013, Orlando, FL

15. Program Committee of "International Conference on Information and Communication Technologies and Applications" (ICTA 2012), November 13-16, 2012, Orlando, FL.
16. Program Committee of the 16<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2012), July 17-July 20, 2012, Orlando, FL.
17. Program Committee of the "Special Track on Science 2.0 and Expansion of Science" (S2ES 2012), July 17-July 20, 2012, Orlando, FL.
18. Program Committee of the 15<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2011), July 19-July 22, 2011, Orlando, FL.
19. Program Committee of the 14<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2010), June 29-July 2, 2010, Orlando, FL.
20. Program Committee of the 13<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2009), July 10-13, 2009, Orlando, FL.
21. Co-Chair of Session "Concepts, Principles, Methodologies and Applications of Cybernetics", WMSCI 2009, July 12, 2009.
22. Co-Chair of Session "Concepts, Principles, Methodologies and Applications of Cybernetics", WMSCI 2008, July 1, 2008.
23. International Institute of Informatics and Systemics (IIIS), Appointed 2008.

**Professional Service on Regional Professional Organization Committees:**

1. Board of Directors, Southwest Decision Sciences Institute (SWDSI), elected for 3-year term 2013-2015.
2. Board Member of MidSouth Computational Biology & Bioinformatics Society (MCBIOS): elected for 3-year term (2009-2012);
3. Elected Office of Secretary for MidSouth Computational Biology & Bioinformatics Society (MCBIOS): elected for 1-year term (2011-2012);
4. Local Arrangements Chair for MidSouth Computational Biology & Bioinformatics Society (MCBIOS) 2010 Conference held at Arkansas State University, February 19-20, 2010; 240 paid registrations from 15 states & CANADA.

**Professional Service at Regional Meeting:**

1. Session Chair for "Internet of Things and Big Data", Southwest Decision Sciences Institute (SWDSI) Meeting, March 2017, Little Rock, AR.

**Service: Arkansas State University**

**1998-Present**

**Awards: "Excellence in External Service", College of Business, April 2011.**

**"Excellence in Professional Service", College of Business, April 2004.**

**Committee Memberships:**

1. Member of Faculty Senate  
Elected for Fall 2006 to Present (2024).  
Shared Governance Oversight Committee (SCOG): 2020-Present  
Faculty Senate Finance Committee Member: 2008-2014.  
Faculty Senate Patent Task Force Committee Member: 2012-2014
2. Member of Data Science Advisory Board (2021-Present)  
Member of Data Science Curriculum Committee (2019-2021)  
Member of Data Visualization Subcommittee (2019-2021)
3. Member of University Centers and Institutes Committee (2020-Present)
4. Member of ISBA Department Viability Report Committee and "Curriculum Effort" Subcommittee (2021 to 2022)
5. Member of University Faculty Research Awards Committee (FRAC) 2006 to 2017.
6. University Sponsored Research Committee  
Member Fall 2011 to Spring 2014, Fall 2018-Spring 2023, Chair 2013-2014
7. College of Business Faculty Development Committee  
Chair: 2011-2012, Member Fall 2004 to Present.
8. College of Business Entrepreneurship Committee  
Co-Chair: 2011-2012, Member 2012 to 2013.
9. College of Business Undergraduate Graduation & Academic Appeals Committee:  
Fall 2011 to Present.

10. Member of CIT Department Promotion, Retention and Tenure (PRT) Committee Elected Fall 2009-Spring 2012.; Appointed 2020-2023
11. Member of Research & Teaching Balance Task Force: How to reward superior teaching and continue to grow research functions - (Spring 2008)
12. Member of IT-Distance Learning-Online Education Task Force Committee - (Fall 2007)
13. Member of Technology Committee, Co-Chair (2003-4) College of Business Fall 1998 to Present
14. Member of Department of CIT/ISBA Grievance Committee - Fall 2005 to Present
15. Member of Department of CIT /ISBA Faculty Search Committee Fall 2003 to Spring 2004, 2021-2023
16. Member of Graduate Curriculum Committee, College of Business Fall 2001 to Spring 2003; 2020-2023
17. Member of Department of Economics & Decision Sciences Technology Committee Fall 1998 to Spring 2002.

**Member of Graduate Programs Comprehensive Exam Committees: Arkansas State University:**

- 1.) Member of Comprehensive Exam Committees in "Master of Engineering Management (MEM)": 2009 to 2020. [About 80 Students]
- 2.) Member of Comprehensive Exam Committees in "Master of Information Systems and E-Commerce (ISeC)": 2004 to Spring 2010. [15 Students]

**Past and Current Trainees of Dr. Richard Segall**

**POST-DOCTORAL STUDENT**

Past/Current Trainee	Trainee Name (Where Training Occurred)	Training Period (degee)	Prior Academic Degree Institution	Prior Academic Degree(s)	Prior Academic Degree Years(s)	Title of Research Project	Current Position of Past Trainees
Past	Dr. Lucy (Shen) Lu	10/23-3/24	U of South Florida	Ph.D.	2023	"Predictive Modeling of Chronic Disease Progression in Humans and Plants using Artificial Intelligence (AI), Data Mining, and Data Visualization Techniques"	N/A

**DOCTORAL DISSERTATION STUDENTS**

DATE	STUDENT NAME	DOCTORAL THESIS TITLE	UNIVERSITY	DISCIPLINE
Current [Fall 2023-Present]	Md Tanver Hasan Kajpl	"Monitoring Water Quality and Lead Toxicity for Proposed Two-Stage Ditch, Upper Cache River Watershed, Arkansas"	Arkansas State University-Jonesboro	Environmental Science
May 2023	Shen Lu	"Graph Analysis on Social Networks"	University of South Florida (USF)	Computer Science
Fall 2022	Peng-Hung Tsai	"Measuring Advancement in Spacefaring"	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 2022	Venkata Jaipal Reddy Batthula	"Exploring Technology Advancement Over Time Using Lifespan as the Product Trait and Satellites in the Example Domain"	University of Arkansas at Little Rock (UALR)	Computer & Information Science



December 2018	Thomas H. Hahn	“Machine Learning on Aging Reverse Engineering Aging with Machine Learning”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 1997	Greg Langevin	“Statistical Inference on Relative Performance of Genetic Algorithms: First Results on the Significance of Knowledge, Direction and Representation in Three Small Networks Structures”	Texas Tech University (TTU)	Information Systems & Quantitative Analysis (ISQS)

**DR. RICHARD SEGALL: MASTERS THESIS & MASTERS PROJECT STUDENTS**

<b>DATE</b>	<b>STUDENT NAME</b>	<b>MASTERS THESIS TITLE</b>	<b>UNIVERSITY</b>	<b>DISCIPLINE</b>
October 2024	Oseghale Robert Obeto	Programming Language Cross-Referencing Website (Code Haven)	University of Arkansas at Little Rock (UALR)	Computer & Information Science
October 2024	Okemute Samuel Idonor	Securing Virtual 3D Reality Experience Using Unity	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 2020	Michael Howell	“Time Series Modelling of Deep Space Mission Spacecraft Life Spans”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
December 2020	Peng-Hung Tsai	“Applying Web Mining Technologies for Data Mining of Models of Advancement Over Time in Space”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
December 2019	Venkata Jaipal Reddy Batthula Kodali	“Lifespan Analysis of Earth Satellites”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
August 2018	Neha Gupta	“Biomedical Text Mining Using Large Scale Distributed Machine Learning Algorithms”	Lamar University (TX)	Computer Science
May 2018	Rohith Kumarreddy Duggirala	“Space Exploration: A Data Analysis of Missions to Astronomical Bodies Beyond Earth”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 2018	Venkat Kodali	“Earth Satellites Data Analysis”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 2015	Nickolas Pippinger	“Information Quality Processes and Methods to Improve Extraction of Numerical Information from Unstructured Texts”	University of Arkansas at Little Rock (UALR)	Computer & Information Science
May 2015	Thomas F. Hahn	“Reverse Effects of Caloric Restriction Reveal Roles of Vacuoles in Longevity”	University of Arkansas at Little Rock (UALR)	Bioinformatics

May 2015	Tevin Wilburn	"Space Faring Activities: Progress in Space Exploration"	University of Arkansas at Little Rock (UALR)	Computer & Information Science
December 2010	Jagadish Pamarthi	"Extracting Properties of Crops from Web Data for Deregulation using ProExTrac"	University of Arkansas at Little Rock (UALR)	Computer Science

**DR. RICHARD SEGALL: FACULTY MENTOR FOR FUNDED\* PROJECTS OF UNDERGRADUTE STUDENTS [\*Sponsored by Arkansas Bioscience Institute (ABI)]**

DATE	STUDENT NAME	PROJECT TITLE	UNIVERSITY	DISCIPLINE
Summer 2024	Prasanna Rajbhandari	"Data Mining and Data Visualization and Interpretation of Big Data for Predictive Analyses and Clinical Diagnoses for Human Diseases and Plant Pathogens"	Arkansas State University - Jonesboro	Information Systems & Business Analytics (ISBA)
Summer 2023	Soichiro Takahashi	"Data Mining and Visualization and Interpretation of Big Data for Predictive Analyses and Clinical Diagnoses for Human Diseases and Plant Pathogens"	Arkansas State University - Jonesboro	Computer & Information Technology (CIT)
Summer 2022	Aasritha Kilari	"Visualization and Interpretation of Big Data for Clinical Diagnosis for different types of Cancer, COVID-19 and other Diseases"	Arkansas State University - Jonesboro	Computer & Information Technology (CIT)
Summer 2021	Vidhya Sankarasubbu	"COVID-19: Survey of Applications of Neural Network, Machine Learning and other Artificial Intelligence (AI) Techniques for this World-Wide Pandemic"	Arkansas State University - Jonesboro	Computer & Information Technology (CIT)
Summer 2020	Quynh Ho	"Applications of Neural Networks to predict Disease-Gene Associations"	Arkansas State University - Jonesboro	Computer & Information Technology (CIT)

**ADDITIONAL INFORMATION ABOUT THESIS & PROJECTS OF COMMITTEES  
THAT DR. RICHA SEGALL SERVED ON**

**Member of PhD Thesis Committees: University of Arkansas at Little Rock (UALR)**

1.) "Modeling Advancement in Spacefaring Through Deep Learning", Fall 2022-Summer 2024.  
Student: Peng-Hung Tsai (Ph.D. in Computer & Information Sciences) defended July 26, 2024.  
Dr. Daniel Berleant, Chair, Department of Information Science

2.) "Exploring Technology Advancement Over Time Using Lifespan as the Product Trait and Satellites in the Example Domain", May 2022.  
Student: Venkata Jaipal Reddy Batthula (Ph.D. in Computer & Information Sciences)  
Dr. Daniel Berleant, Chair, Department of Information Science

3.) "Machine Learning on Aging Reverse Engineering Aging with Machine Learning", December 2018.  
Student: Thomas H. Hahn, Program in Bioinformatics, UALR/University of Arkansas for Medical Sciences  
Fusheng Tang, PhD. Thesis Advisor, Department of Biology, UALR,  
Helen Benes, UAMS, Mary Yang, Head of Bioinformatics Program, Department of Information Science,  
M.Orloff (UAMS), F. Simmen (UALR), and S. Ayyadevara (UAMS)

**Member of PhD Thesis Committee: University of South Florida (USF), 2021-2023**

1.) "Graph Analysis on Social Network",  
Student: Shen Lu, Department of Computer Science and Engineering,  
University of South Florida (USF), Tampa, FL  
Major Professor: Dr. Les Piegl, University of South Florida, Department of Engineering & Computer Science

**Member of PhD Thesis Committee: Arkansas State University, Environmental Sciences Program, 2023-2024**

1.) Md Tanvit Hasan Kajpl, "Monitoring Water Quality and Lead Toxicity for Proposed Two-Stage Ditch, Upper Cache River Watershed, Arkansas"

**Member of MS Thesis Committees: University of Arkansas at Little Rock (UALR) 2020**

1.) "Time Series Modelling of Deep Space Mission Spacecraft Life Spans"  
Dr. Daniel Berleant, Chair, Department of Information Science,  
Michael Howell (M.S. in Information Science, May 2020, UALR)

2.) "Applying Web Mining Technologies for Data Mining of Models of Advancement Over Time in Space"  
Dr. Daniel Berleant, Chair, Department of Information Science.  
Peng-Hung Tsai (M.S. in Information Science, December 2020, UALR)

**Faculty Mentor on Sponsored Summer Research Program for Undergraduates: A-STATE (2024)**

"Data Mining and Data Visualization and Interpretation of Big Data for Predictive Analyses and Clinical Diagnoses for Human Diseases and Plant Pathogens". Student: Prasanna Rajbhandari.  
Funded \$3500 by Arkansas Biosciences Institute (ABI) for Summer 2024

**Faculty Mentor on Sponsored Summer Research Program for Undergraduates: A-STATE (2023)**

Data Mining and Visualization and Interpretation of Big Data for Predictive Analyses and Clinical Diagnoses for Human Diseases and Plant Pathogens". Student: Soichiro Takahashi.  
Funded \$3500 by Arkansas Biosciences Institute (ABI) for Summer 2023

**Faculty Mentor on Sponsored Summer Research Program for Undergraduates: A-STATE (2022)**

"Visualization and Interpretation of Big Data for Clinical Diagnosis for different types of Cancer, COVID-19 and other Diseases". Student: Aasritha Kilari.  
Funded \$3500 by Arkansas Biosciences Institute (ABI) for Summer 2022.

**Faculty Mentor on Sponsored Summer Research Program for Undergraduates: A-STATE (2021)**  
*"COVID-19: Survey of Applications of Neural Network, Machine Learning and other Artificial Intelligence (AI) Techniques for this World-Wide Pandemic"*. Student: Vidhya Sankarasubbu.  
Funded \$3500 by Arkansas Biosciences Institute (ABI) for Summer 2021.

**Faculty Mentor on Sponsored Summer Research Program for Undergraduates: A-STATE (2020)**  
*"Applications of Neural Networks to predict Disease-Gene Associations"*. Student: Quynh Ho.  
Funded \$3500 by Arkansas Biosciences Institute (ABI) for Summer 2020.

**Member of MS Thesis Committees: University of Arkansas at Little Rock (UALR) 2019**  
*"Lifespan Analysis of Earth Satellites"*, Dr. Daniel Berleant, Chair, Department of Information Science,  
Venkata Jaipal Reddy Batthula Kodali (M.S. in Information Science, December 2019, UALR)

**Member of Thesis Committee: Lamar University, Beaumont, TX 2017-2018:**

- 1.) Neha Gupta, Department of Computer Science, M.S. in Computer Science.  
Date of Graduation: August 2018; Date of Thesis Supervision: January 2017 to August 2018  
Thesis Title: *"Biomedical Text Mining Using Large Scale Distributed Machine Learning Algorithms"*  
Thesis Committee: Graduate Advisor: Dr. Timothy Roden, Lamar University  
Graduate Co-Advisor: Dr. Stefan Andrei, Lamar University  
Thesis Committee Member: Dr. Richard Segall, A-STATE

**Member of MS Project Committees: University of Arkansas at Little Rock (UALR) 2016-2018**  
Rohith Kumarreddy Duggirala, *"Space Exploration: A Data Analysis of Missions to Astronomical Bodies Beyond Earth"* (M.S. in Information Science, May 2018, UALR)  
Dr. Daniel Berleant, Chair, Department of Information Science

**Member of MS Thesis Committees: University of Arkansas at Little Rock (UALR) 2017-2018**  
*"Earth Satellites Data Analysis"*, Student: Venkat Kodali (M.S. in Information Science, May 2018, UALR)  
Dr. Daniel Berleant, Chair, Department of Information Science.

**Member of Master's Thesis Committee: University of Arkansas at Little Rock (UALR) 2009-2015:**  
Nickolas Pippingier, *"Information Quality Processes and Methods to Improve Extraction of Numerical Information from Unstructured Texts"*, Master of Information Quality option in Information Science.  
Thesis was partially funded by P3 [Plant-Powered Production] Grant with:  
Professor Daniel Berleant (UALR), Elizabeth Hood (A-STATE), and Richard Segall (A-STATE).

**Member of Master's Thesis Committee: University of Arkansas at Little Rock (UALR) 2015:**  
Thomas F. Hahn<sup>1,2</sup> *"Reverse Effects of Caloric Restriction Reveal Roles of Vacuoles in Longevity"*  
<sup>1</sup>Department of Biology, University of Arkansas at Little Rock  
<sup>2</sup>Program of Bioinformatics, University of Arkansas at Little Rock, Little Rock, AR 72211

**Member of McNair Summer Program Project at University of Arkansas at Little Rock (UALR) 2015:**  
Tevin D. Wilburn, *"Space Faring Activities: Progress in Space Exploration"*, with Professor Daniel Berleant, University of Arkansas at Little Rock (UALR), Department of Information Science.

**Member of Master's Thesis Committee: University of Arkansas at Little Rock (UALR) 2009-2010:**  
Jagadish Pamarthi, Department of Computer Science, M.S. in Computer Science.

Date of Graduation: December 2010; Date of Thesis Supervision: January 2009 to December 2010  
Thesis Title: *"Extracting Properties of Crops from Web Data for Deregulation using ProExTrac"*  
Thesis Committee: Graduate Advisor: Dr. Coskun Bayrak, UALR  
Graduate Co-Advisor: Dr. Daniel Berleant, UALR;  
Thesis Committee Member: Dr. Richard Segall, A-STATE

Thesis funding obtained from P3 [Plant-Powered Production] Grant awarded by Arkansas Science and Technology Authority (ASTA) in 2009-2010 with Dr. Richard Segall as Co-PI.

**Service: Albany State University 1997-98**

1. Committee to Develop the MIS Program, Chair
2. Distance Learning/Weekend University, Member
3. Grade Appeal Committee, Member
4. Management Committee, Member
5. College of Business Computer Labs, Member

**Service & Thesis Committee Member: Texas Tech University 1996-97**

1. Served on Doctoral Dissertation Committee of thesis entitled "Statistical Inference on Relative Performance of Genetic Algorithms: First Results on the Significance of Knowledge, Direction and Representation in Three Small Networks Structures" by Greg J. Langevin, Area of Information Systems and Quantitative Sciences (ISQS).
  
2. Served in development of "Program in Medical Informatics via Distance Learning" with the International Center of Informatics Research (ICIR) within College of Business Administration (COBA).

**Service: University of New Hampshire 1989-90**

1. Undergraduate Curriculum Committee of Department of Mathematics

**Service: University of Massachusetts at Lowell 1986-89**

1. Graduate Curriculum Committee of Department of Mathematical Sciences
2. Mathematics Day, Co-Chair
3. Statistics and Operations Research Master's Projects, Committee Member