

**STEPHEN L. SPERRY**

**Senior Lecturer**

School of Planning, Development, Preservation and Landscape Architecture  
College of Architecture, Arts and Humanities  
Clemson University

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**BUSINESS ADDRESS**

School of Planning, Development, Preservation and Landscape Architecture  
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**EDUCATION**

- Harvard University, Graduate School of Design.  
Master of Landscape Architecture, 1975.
- SUNY, College of Environmental Sciences and Forestry at Syracuse University.  
Bachelor of Landscape Architecture with Design Honor, 1970.
- NASA, Goddard Space Flight Center.  
Remote Sensing Training Course, 1981.

**UNIVERSITY EXPERIENCE**

- **Senior Lecturer, Department of Planning and Landscape Architecture, Clemson University, 2002 to Present.**  
Revamped Clemson University Department of Planning and Landscape Architecture's GIS courses to reflect both GIS and planning applications. Used the latest releases of both ESRI and ERDAS software and introduced spatial modeling to the curriculum. Expanded GIS instruction to the Real Estate and Landscape Architecture programs. Current research activities focuses on evaluating the impacts of suburban and new urbanist developments using growth and assessment models. This includes quantifying land use change, and the impacts of sprawl by biodiversity and impervious surfaces in watersheds. Additional research includes analysis of demographic patterns in the US. Serve as Chair of the University's GIS Committee as well as being a member of University and Department search committees. Developing databases for Clemson University land assets.
- **Assistant Professor, Department of Landscape Architecture, The Ohio State University, 1976 to 1982.**  
Organized, lectured, and managed studio courses in regional planning and urban design. Responsible for the development of GIS courses and capabilities at the university, as well as, coordinating student efforts in community planning services. Taught over 500 Landscape Architecture, Architecture, and City and Regional Planning students in planning applications and GIS concepts. As Principal Investigators to Ohio Department of Natural Resources, formulated the planning process for statewide reclamation of abandoned mine lands.

## Academic Activities and Services at Clemson University

- Courses taught at Clemson University
  - CRP 803 – Quantitative Analysis
  - CRP 804 – Land Use Analysis
  - CRP 807 – Professional Studio
  - CRP 830 – Introduction to GIS
  - CRP 834 – Spatial Modeling Using GIS
  - CRP 835 – GIS & Remote Sensing Applications for Trend Analysis
  - CRP 854 – Planning Methods II: Introduction to GIS Planning Applications
  - CRP 858 – Planning Terminal Project Proposals
  - CRP 859 – Planning Terminal Projects
  - CRP 866 – Professional Studio
  - CRP 889 – GIS Planning: Geodesign for the Urban Regions
  - CRP 889 – Basic Elements of Urban Design
  - CRP 889 – Introduction to Urban Design
  - CRP 889 – Readings in Geographic Information Systems (GIS) and Planning
  - CRP 890 – Directed Studies in City and Regional Planning
  - CRP 891 – Planning Thesis
  - LARCH 351/451 – Regional Landscape Planning and Design for Sustainable Development
  - LARCH421 – Landscape Architecture Seminar
  - LARCH 801 – Landscape Architecture Orientation I
  - LARCH 802 – Landscape Architecture Orientation II
  - EDP 807 – Readings in Geographic Information Systems (GIS) and Planning
- Committee Member, Clemson University GIS Steering Committee, 2012 - present.
- Had paper cited and interviewed for Wall Street Journal article published on February 8, 2013 titled "What's a View Worth?"
- Principal Investigator, Clemson University Board of Trustees Grant, Development of a Land Asset GIS Database and Management Application, \$115,000, 2009 – 2012.
- Supported three students for full academic year appointments and four students for the summer semesters with research money.
- Presented "Development Trend Modeling - A Template for GeoDesign and Comprehensive Planning" to Upstate Forever, 2012.
- Presented "Ten At The Top Development Trend Modeling" to South Carolina American Planning Association Chapter's Fall Meeting, 2011.
- Produced the analysis for the Ten at the Top report distributed to over 175,000 residents in the Upstate, giving Clemson University recognition for advanced GIS capability.
- Produced the analysis for Upstate Forever, 2010 Land Cover and Forest Change Detection Analysis.
- Committee Member, Ten at the Top Vision Committee, 2010 - present.
- Co-Investigator, Upstate Forever, "1992-2010 Landcover Change for the South Carolina Upstate", 2010.
- Developed a new GIS course titled Urban Regions: Planning and Design, 2010.
- Chair, Department of Planning and Landscape Architecture Technology Committee, 2009.

- Developed a new Urban Design Certificate program for CRP which required developing two new design courses, 2009.
- Presented "Alternative Futures Analysis of the Seneca Drainage Basin" to Oconee County stakeholders, 2009.
- Reviewer for William Marsh's Landscape Planning Environmental Applications, Fifth Edition, John Wiley and Sons, Inc., 2009.
- Reviewer for Landscape and Urban Planning Journal, An International Journal of Landscape Ecology, Planning and Design, Elsevier Publishing Company, 2006-2007.
- Research Associate, Strom Thurmond Institute, Landcover Change from 1985 to 2000. Saluda/Reedy River Drainage Basin.
- Contributor to US EPA's Publication of Model Courses for Teaching Smart Growth Principals, 2006.
- Assisted the Friends of Lake Keowee with an Alternative Futures Analysis of the Seneca Creek Watershed, 2006.
- Panel member of CNN's "*The Legacy of Hurricane Katrina*" to discussed the hurricane's effects on New Orleans and planning implications for the future. The show was aired by 2500 radio affiliates and is available as a podcast on the web (<http://www.cnn.com/services/podcasting/>).
- Expanded GIS instruction within the Department to all the programs.
- Managed the revision of the Department's Website, 2002 to 2005.
- Chair of the Department's Technology Committee, 2009 to present.
- Chair of the University's GIS Committee, 2003 to present.
- Member of the University Search Committee for Vice Provost of Technology, 2005-2006.
- College of Architecture, Arts and Humanity's representative to the Provost's GIS Committee.
- Member of the College of Architecture, Arts and Humanity's Research Committee, 2003-2005.
- Member of the Real Estate and Development Program Faculty Search Committee, 2006.
- Member of the City and Regional Planning Program Faculty Search Committee, 2003- 2006.
- Member of the City and Regional Planning Program Admissions Application Review Committee, 2003 to present.
- Member of the University Parking Committee, 2006 -2009.
- Reviewer of CELA 2003 abstracts.
- Attended "Teaching More While Talking Less" facilitated by Fran McGuire, 2002-03 OTEI Faculty Fellow.
- Attended "How Students Learn: Strategies for Teaching from the Psychology of Learning" facilitated by Dr. Todd Zakrajsek, Director of Academic Excellence, Central Michigan University. May, 2003
- Attended "Publish, Don't Perish: Twelve Steps to Help Scholars Flourish" facilitated by Dr. Tara Gray, New Mexico State University. December 2002.
- Attended three Blackboard Assessment and Communication classes.

- Attended several OTEI workshops including:
  - Categorizing to Learn
  - Scholarship Made Easier: Best Practices for Writing & Publishing
  - Using Your Student Evaluations for Teaching Improvement and Review
  - Making Your Course Documents More Readable
  - Teaching, Learning and Personality Preference
  - Maximizing Student Learning and Participation in Discussions
  - Five Decisions Students Make About You
  - Taking Command of Your Classroom with Kindness
  - Student Ratings: What Factors Affect Them and How You Can Improve Them
  - Writing Objective Test Items That Assess Thinking Skills
  - Fostering Critical Thinking and Mature Valuing Across the Curriculum
  - Team-Based Learning: A Tool to Revitalize Your Courses
  - Teaching More While Talking Less
  - Publish, Don't Perish
  - How Students Learn, Strategies for Teaching
  - Developing and Assessing Critical Thinking Skills: Strategies for the Classroom
- Guest Lectures:
  - 2012 RED 812 – *Real Estate Technology* 2003 South Carolina Academy for Planning short course – *Planning Applications Using GIS*
  - 2009 LARCH 351/451 – *GIS Applications in Landscape Architecture* 2003 LARCH 451 – *GIS Applications in Landscape Architecture*
  - 2008 LARCH 351/451 – *GIS Applications in Landscape Architecture*
  - 2007 LARCH 351/451 – *GIS Applications in Landscape Architecture*
  - 2006 LARCH 351/451 – *GIS Applications in Landscape Architecture*
  - 2005 EDP 812 – *Seminar in Environmental Design and Planning*
  - 2005 LARCH 351/451 – *GIS Applications in Landscape Architecture*
  - 2005 CRP 402/602 – *Environmental Assessment for Sustainable Development*
  - 2004 CRP 402/602 – *Environmental Assessment for Sustainable Development*
  - 2004 LARCH 451 – *GIS Applications in Landscape Architecture*
  - 2004 EDP 812 – *Seminar in Environmental Design and Planning*

### **Academic Activities and Services at The Ohio State University**

- Courses taught at The Ohio State University
  - LA 271 – Landscape Architectural Design Communication I
  - LA 272 – Landscape Architectural Design Communication II
  - LA 321 – Landscape Construction: Earthwork As Design
  - LA 355 – Landscape Architectural Site Planning
  - LA 356 – Urban Open Space Design
  - LA 453 – Comprehensive Landscape Planning
- Founded and implemented the Ohio Community Assistance Service which provided student design services to Ohio towns and organizations.
- Acquired and taught the first GIS software at the University.
- Acquired and taught the first Remote Sensing software at the University.
- University Senate, The Ohio State University, 1981-82.

- Advisory Committee, Mining and Mineral Resources Research institute, The Ohio State University, 1978-82.
- College of Engineering Computer Planning Committee, The Ohio State University 1978-82.
- School of Architecture Computer Planning Committee, The Ohio State University 1978-82.
- Department of Landscape Architecture's Goals Committee, 1976-78.
- Department of Landscape Architecture's Curriculum Committee, 1979.

## AWARDS

- The Award of Recognition for excellence in teaching, research and service from the International Council of Educations in Landscape Architecture, June, 2006.

## PAPERS

### **Papers Published in Peer Reviewed Journals and Symposium Proceedings**

\* denotes peer reviewed publication

\*\* denotes peer reviewed proceedings

- \*Feltman, J.A., T.J. Straka, C.J. Post, and S.L. Sperry, 2012." Geospatial analysis application to forecast wildfire occurrences in South Carolina" *Forests*, 3(2):265-282, 2012. Basel, Switzerland.
- \*Wyman, D. and S. Sperry, 2009 "The Million Dollar View: A Study of Golf, Mountain, and Lake Lots", *The Appraisal Journal*, Spring 2010. Chicago, IL.
- \*Sperry, S and A. Dunning, "2005.CRP 804 Land Use Analysis", chapter contribution to Model Courses for Teaching Smart Growth Principals, US Environmental Protection Agency.
- \*Sperry, S, 2003 "Biodiversity as an Indicator in Assessing the Consequences of Sprawl", *CELA* 2003 , Charleston, SC September, 2003.
- \*Sperry, S. and L. Jordan, 1992, "Visualizing geography: using a GIS to turn spatial concepts into reality", *Conference Proceedings: American Congress on Surveying and Mapping (ACSM); American Society for Photogrammetry and Remote Sensing (ASPRS) Vol.:5 pp: 266-270*, Washington, DC, August 1992
- \*Novak, K. and S. Sperry, 1992, "Integrating Digital Photogrammetry and GIS", *Conference Proceedings: American Congress on Surveying and Mapping (ACSM); American Society for Photogrammetry and Remote Sensing (ASPRS) Volume: 2 pp: 57-64*, Washington, D.C, August 1992.
- \*Sperry, S and Smail, H, 1986 "The Geographic Information system process and Its Application to Environmental Assessment of a High-Level Nuclear Waste Repository", 657-674, Geographic Information Systems in Government Vol. 2 1986 Deepak Publishing ISBN 0-937194-20-4
- \*Sperry, S, 1981. "Planning Methodologies Relating to the Development of Ohio's Abandoned Mine Lands Reclamation Program", The Challenge of Change, The Council of Educators in Landscape Architecture, University of Washington, Seattle, Washington, August , 1981.

## **Papers Published in Symposium Proceedings**

\*\* denotes peer reviewed presentation

- \*\*Sperry, S, 2010 “Creating Growth Models for the Seneca Subdrainage Basin”, Proceedings of the 2010 South Carolina Water Resources Conference, Columbia, SC October, 2010.
- \*\*Sperry, S, 2009 “Using Deterministic Models for Developing a Open Space Plan for an Urban/Rural Watershed”, Proceedings of the 2009 GeoTools Conference, Myrtle Beach, SC March, 2009.
- \*\*Sperry, S, 2008 “New Urbanists Communities and Traditional Suburban Development”, Proceedings of the Twenty Seventh Annual ESRI User Conference, San Diego, CA August, 2008.
- \*\* Nardi,, M, S. Sperry and T. Davis, “Lake and Golf Residential Deterministic Model for the Oconee Watershed” Twenty Seventh ESRI International User Conference, San Diego, CA August, 2008
- \*\*Sperry, S, 2008. “Using Deterministic Models For Long Range Future Growth in an Urban/Rural Watershed”, AESOP-ACSP 2008 Joint Congress, Chicago IL July, 2008.
- \*\*Nardi,, M, S. Sperry and T. Davis, “Grain Supply Chain Management Optimization Using ArcGIS in Argentina” Twenty Sixth ESRI International User Conference, San Diego, CA June, 2007.
- \*\*Sperry, S, 2005 “Are Republicans Sprawlers and Democrats New Urbanists? – Comparing 83 Sprawling Regions with the 2004 Presidential Vote”, ACSP 2005 Conference, Kansas City, MO Oct, 2005.(under review)
- \*\*Sperry, S, 2005 “Are Republicans Sprawlers and Democrats New Urbanists? – Understanding the Spatial Analysis of the 2004 Presidential Vote”, Proceedings of the Twenty-Fifth Annual ESRI International User Conference, San Diego, CA July, 2005.
- \*\*Sperry, S, 2004 “Measuring the Consequences of Land Use Development Using Free Downloadable Government Data”, GIS for Local Government Conference 2004, October, 2004.
- \*\*Sperry, S, 2004 “Measuring Sprawl’s Consequences – Linking Biodiversity Change with Development Planning”, Proceedings of the Twenty-Fourth Annual ESRI User Conference, San Diego, CA Aug, 2004.
- \*\*Sperry, S, 2003. “Strategic Environmental Assessment – Linking Change Detection with Sustainable Development Planning”, AESOP-ACSP 2003 Joint Congress, Leuven, Belgium, July, 2003.
- \*\*Sperry, S, 2003. “ArcGIS Spatial Analyst Changes the Approach to Teaching Planning Applications”, Proceedings of the Twenty-Third Annual ESRI User Conference, July, 2003
- \*\* Sperry, S. and K. Schwoppe, 1992, “Understanding global change with local and regional impact studies” Conference Proceedings of American Society for Photogrammetry and Remote Sensing/American Congress on Surveying and Mapping Volume: 1 pp: 43-46 Washington, D.C., August 1992
- \*\*Novak, K, and S. Sperry, 1992. “Integration Of Digital Photogrammetry and Raster GIS”. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992.

- \*\*Sperry, S, 1992. "Raster Imagery for Land-base Construction". Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992
- \*\*Sperry, S, and L. Jordan, 1991 "Statistical and Spatial Modeling: Raster Processing for the 1990's", Conference Proceedings: American Congress on Surveying and Mapping (ACSM); American Society for Photogrammetry and Remote Sensing, Atlanta, GA, Vol. B, pp: 1-5, October 1991
- \*\*Sperry S., B. Rado, and C. Smith. "Raster-Vector Integration: Case Study Examples Of Urban, Wetlands And Regional Studies". Proceedings of EGIS '91. Brussels: EGIS Foundation, May, 1991.
- \*\*Stow, D., S. Westmoreland, D. McKinsey, R. Parrott, S. Carnevale, D. Collins and S. Sperry, 1991. "Processing Flows for Correcting and Updating Vector-Coded GIS Layers Using Remotely Sensed Data", Proceedings of the Initiative Twelve Symposium, American Society of Photogrammetry and the National Center for Geographic Information Analysis, Baltimore, MD., April, 1991.
- \*\*Stow, D., S. Westmoreland, D. McKinsey, F. Mertz, J. Nathanson, S. Sperry and D. Nagel, 1990. "Efficient Creation, Correction and Updating of Vector-Coded GIS Coverages Using Remotely Sensed Data", Proceedings of GIS/LIS '90, 209-218, Anaheim, California, November, 1990.
- \*\*Stow, D., S. Westmoreland, D. McKinsey, F. Mertz, D. Collins, S. Sperry and D. Nagel, 1990. "Raster-Vector Integration for Updating Land Use Data", Proceedings of the 23rd International Symposium on Remote Sensing of Environment, 837-844, Bangkok, Thailand, May, 1990.
- \*\*Sperry, S, 1988 "The ERDAS and ARC/INFO GIS Workstation - An Application For The Chesapeake Bay Critical Area Program", Conference Proceedings: American Congress on Surveying and Mapping (ACSM); American Society for Photogrammetry and Remote Sensing Volume: 5 pp: 226-231 March 1988
- \*\*Johnston, Kevin, Dana Tomlin, Steve Sperry, Don Roche, Hugh Keegan; Nick Tonia; Tim Johnson; Dennis Smith; Bob Baldassano; and Jeff Koche, 1988. "Orpheus: An Integration", Conference Proceedings: American Congress on Surveying and Mapping (ACSM); American Society for Photogrammetry and Remote Sensing Volume: 5 pp: 11-22 March 1988
- Sperry, S 1981 "The Use of a Computer Programming System and Remote Sensing for land management and Habitat Evaluation." Land Management for the 80's, The Ohio Department of Natural Resources, et al. Mohican State Park, Ohio

### **RECENT PRESENTATIONS**

\*\* denotes peer reviewed presentation

- Sperry, S, 2011 "Ten At The Top Development Trend Modeling" to South Carolina American Planning Association Chapter's Fall Meeting, Anderson, SC October 2011.
- \*\*Sperry, S, 2010 "Creating Growth Models for the Seneca Subdrainage Basin", Proceedings of the 2010 South Carolina Water Resources Conference, Columbia, SC October, 2010.
- \*\*Sperry, S, 2009 "Using Deterministic Models for Developing a Open Space Plan for an Urban/Rural Watershed", Proceedings of the 2009 GeoTools Conference, Myrtle Beach, SC March, 2009.

- \*\*Sperry, S, 2008 “New Urbanists Communities and Traditional Suburban Development”, Proceedings of the Twenty Seventh Annual ESRI User Conference, San Diego, CA August, 2008.
- \*\*Sperry, S, 2008 “New Urbanists Communities and Traditional Suburban Development”, Proceedings of the Twenty Seventh Annual ESRI User Conference, San Diego, CA August, 2008.
- \*\*Sperry, S, 2008. “Using Deterministic Models For Long Range Future Growth in an Urban/Rural Watershed”, AESOP-ACSP 2008 Joint Congress, Chicago IL July, 2008.
- Panel: How Do You Keep Your Technical Team Trained? When Everything Is Changing So Rapidly. Wayne Meyer (SCANA), Steve Sperry (Clemson), Bruce Harper (Colleton County) 2008 South Carolina GIS Conference, Greenville SC, Feb 4, 2008
- Panel: What Skills Do You Look For in a GIS Graduate? Linda Wayne (GeoMaxim), Steve Sperry (Clemson), Bruce Harper (Colleton County) 2008 South Carolina GIS Conference, Greenville SC, Feb 5, 2008
- \*\*Sperry, Stephen. 2007. “New Urbanist Communities, Where Are the People?”. Council of Educators in Landscape Architecture (CELA). Penn State University, PA, August, 2007
- Sperry, S, 2007 "Measuring Sprawl's Consequences: Linking Impervious Surface and Biodiversity Change with Land Use Planning", Our Past Before Us, The Search for the South Carolina Upcountry Conference, Clemson and Furman Universities, March, 2007.
- Sperry, S, 2006 “Using GIS to Map Voting Patterns of the 2004 Presidential Election”, ESRI Southeast Users Conference, Jacksonville, FL April, 2006.

### **Other Articles / Project Reports**

- Sperry, S. “GIS Planning: Geodesign for the Urban Regions” (a series of exercises underdevelopment for Esri SpatiaLabs)
- Sperry, S. “Geodesign Planning Methods” (a series of exercises underdevelopment for Esri SpatiaLabs)
- Sperry, S.. Sustainable Planning Methods – GIS Spatial Analysis for Planners and Landscape Architects (a book underdevelopment for ESRI Press)
- Sperry, S. and B. Nocks. 2010. “1992-2010 Land Cover Change for the Upstate”, Upstate for Ever.
- Sperry, S “New Urbanist Communities, Where Are the People?” (under development)
- Sperry, S, “Comparing New Urbanist Standards by Private and Public Development” (under development)
- Sperry, S, “ Developing Planning Databases with Free Government Data”. (under development)
- Sperry, S, “Using High Resolution Satellite Imagery and Census Data to Map the Sprawl Consequences of Development” (under development)
- Goetcheus C. and S. Sperry 2007. The Historic Landscape of the Charles Pinckney National Historic Site. US Department of the Interior



- Sperry, S and J. Allen, 2006 “Landcover Change Model for the Saluda/Reddy River Drainage Basin”
- Baffes, A and S. Sperry, 1992 “Lake Michigan Ozone Study, Land Use/Land Cover Classification from Satellite Imagery”, Lake Michigan Air Directors Consortium
- Stow, D., S. Sperry, R. Parrott, S. Camarata and F. Mertz, 1991. “Efficient Updates of Vector-Coded Geographic Information Systems Using Remotely Sensed Data, NASA Earth Observations Commercialization and Application Program Final Report”.
- Sperry, S and C. Nelson, 1986, “Permian Location Study – Visual Assessments for Swisher County and Deaf Smith County Locations”, NUS Corporation, Gaithersburg, Maryland.
- Sperry, S and C. Nelson, 1986, “Permian Location Study – Rail Transportation Corridor Analysis Report: Deaf Smith Location in the Palo Duro Basin, Texas”, NUS Corporation, Gaithersburg, Maryland.
- Tampa Bay Regional Planning Commission, 1986, “Habitat Restoration Study for the Tampa Bay Region”, St. Petersburg, Florida.
- Sperry, S and J. Koerner, 1985, “Southeast Central Oklahoma Study, Environmental Resource Inventory, NUS Corporation
- Sperry, S, and J. Koerner, 1984, “Socioeconomic Database Report for the Savannah River Plant, NUS Corporation
- Sperry, S and J. Koerner, 1983, “Kennedy Space Center Demographic and Land Use Study”, NUS Corporation
- Sperry, S and J. Simpson, 1982. “The Wheeling Creek Drainage Basin Report”, Ohio Department of Natural Resources, Division of Reclamation
- Sperry, S and D. Blau, 1976. “The Seafarer Corridor Analysis”, EDAW, Inc.
- Sperry, S and A. Masa, 1975. “The Novato Creek Bay Plain Economic Planning Study”, EDAW, Inc.
- Sperry, S and P. Trowbridge, 1975. “The Baltimore/Washington Parkway and Russell Street Corridor”, Hornbeck/Okerlund Associates
- Sperry, S, B. Rowland, L. Mizerny, G. Bloss, 1975. “The Middle Segment of the Charles to Charles Open Space Corridor”, Brookline Conservation Commission

### **Research Contracts / Grants**

- Principal Investigator, Clemson University Board of Trustees Grant, Development of a Land Asset GIS Database and Management Application, \$115,000, 2009
- Co-Investigator, US Department of the Interior, Research on the Historic Landscape of the Charles Pinckney National Historic Site; \$11,000, 2005
- Principal Investigator, Clemson College of Architecture, Arts and Humanities Grant, Research Comparison of New Urbanist Developments with Traditional Suburban Developments, \$5,000, 2004

- Principal Investigator, Clemson University Innovative Funding Grant, Comparison of New High Resolution Imagery with Earlier Satellite Imagery for Mapping Land Use Change, \$3,000, 2003
- Principal Investigator, Clemson College of Architecture, Arts and Humanities Grant, Research of Land Use Change for Quantifying the Consequences of Sprawl, \$4,800, 2003
- Principal Investigator, NASA EOAP Contract, Development of a Desktop Geographic Information System, \$750,000 1994 – 1998
- Co-Investigator, NASA SBIR Phase II Contract, Expert Image Classification System Utilizing Innovative Knowledge Engineering, \$500,000. 1992 – 1998
- Principal Investigator, NASA SBIR Phase I Contract, Expert Image Classification System Utilizing Innovative Knowledge Engineering, \$50,000. 1990 – 1991
- Co-Investigator, NASA EOAP Contract, Efficient Updates of Vector-Coded Geographic Information Systems Using Remotely Sensed Data, \$600,000. 1988 – 1991
- Principal Investigator, Ohio Department of Natural Resources Contract, The Planning Methodologies Relating to the Development of Ohio's Abandoned Mine Lands Reclamation Program, \$50,000. 1978 – 82.

## PROFESSIONAL EXPERIENCE

- **Movaz Networks Inc., Director, Release Management, October, 2000 to April, 2002.**  
At this dynamic start-up company, established the hardware and release management procedures for a new optical network equipment company. Then managed the company's Information Technology (IT) capabilities for a rapid growth – expanding from 80 to over 300 employees. Instituted company policies and procedures for security, desktop support, WAN and Windows 2000 LAN support and telecommunications. Managed the design and implementation of a Frame Relay and Internet network between corporate offices in Atlanta, Washington DC, Cleveland and Montreal. The secure network included Cisco firewalls and VPN remote access for 12 domestic and international sales offices, and video conferencing between offices. Recommended and implemented the company's business support or ERP system that included SAP and outsourced support for the company's Oracle database. Finally, investigated Manufacturing Execution Systems (MES) solutions for the tracking of manufacturing processes of the new optical network equipment.
- **RouteMatch.com, Inc., Vice President and Interim CEO, January, 2000 to October, 2000.**  
As acting head of a start-up company, took a GIS logistics software product to market. Responsible for recruiting talent, organizing and managing the overall operations. Managed the business plan to expand the company's Application Service Provider (ASP) solution for rural transportation agencies providing non-emergency medical transportation.
- **QWIZ, Inc., Director, Product Management, July, 1999 to January, 2000.**  
As a member of the senior management team, coordinated the planning, project implementation and support of a skills testing product. Responsible for upgrading the company's DOS product lines

to the latest Windows and Internet technology. Had direct contact with customers, developed user forums, defined user needs and requirements, and translated them into new software functionality.

- **Consultant, June, 1998 to June, 1999.**  
Clients included remote sensing and spatial analysis companies as well as a Fortune 500 company. The work integrated new product development and marketing of data and software packages. This included market research into geographic data vertical markets such as telecommunications and competitive pricing and packaging of the products.
- **ERDAS, Inc., Director of the Desktop Products Division, July, 1987 to June, 1998.**  
Created a new division in ERDAS that focused on the broader commercial market of desktop applications. This division is an outgrowth of the earlier strategic planning efforts into new markets. Since 1995, the job responsibilities were providing leadership, direction, and program management for the software development, sales, and marketing activities for a new desktop mapping product called MapSheets. The application integrated with Microsoft Office using OLE and now COM. This includes managing the division's budget and development schedules, as well as, working with the marketing and development team on schedule and product specification, usability, marketing strategy, development objectives and goals.  
  
Previously as Director of Strategic Planning and Marketing Manager, was responsible for leading the development plans and strategic opportunities. This included conducting market research and price analyses, determining software priorities, managing major proposal preparation, and coordinating the development process of new software applications. Developed and managed ERDAS' third party relations with ESRI, Microsoft, Digital, IBM, and others. Served as the spokesman for ERDAS in the desktop mapping market and have made numerous presentations at major GIS conferences.
- **NUS Corporation, Senior Planner, July, 1982 to July, 1987.**  
Responsible for the development of GIS Computer Services, including image processing, planning studies, and data base management. Incorporated ARC/INFO and ERDAS software. Duties also included proposal preparation, market research, sales, and setting priorities for the acquisition of computer hardware and software in developing GIS capabilities. As Senior Planner, oversaw the planning process for siting of High Level Nuclear Waste Facility for the US Department of Energy.
- **EDAW, Inc., Project Manager, August, 1975 to August, 1976.**  
 Developed innovative planning process and with unique mapping techniques of regional factors for general environmental assessments and facility siting for the US Navy's Seafarer Project.
- **Hornbeck/Okerlund Associates, Project Manager, June, 1974 to June, 1975.**  
 Managed the visual resources study for the Baltimore-Washington Parkway.
- **Johnson, Johnson and Roy, Inc., Designer, January, 1973 to August, 1973.**  
 Master planned a variety of residential communities, industrial parks, and recreational areas.
- **The SWA Group, Designer, August, 1971 to December, 1972.**  
 Developed schematic design plans for planned unit developments and resort complexes.

## Accomplishments

- Developed the first integration of raster and vector technology in GIS software.
- Developed the first graphical modeling package in GIS software.
- Developed the first rules-based or expert system GIS modeling package.
- Developed the first GIS software integrated with spreadsheet modeling capability
- Testified before US Congressional Science Committee on June 26, 1991 and presented at the Congress' Office of Technology Assessment Workshop on May 20, 1992 concerning commercial applications of government satellite imagery.
- Had operational responsibility for ERDAS' major software deals and support contracts, including proposal preparation, contract negotiation, evaluation tests, and client contract.
- Guided the strategic direction and vision of ERDAS MapSheets, a GIS product for desktop mapping analysis and presentations targeted at Microsoft Office users.
- Managed the software development as well as the marketing activities of integration between ERDAS and ESRI's Arc/Info software. This included the first commercial integration of raster and vector technology.
- Won several major proposals in new business areas for ERDAS, including contracts totaling over \$2,000,000 from NASA for the development of new software applications.
- Personally wrote and won over \$1,000,000 in consulting services in markets never penetrated by ERDAS. Clients included Loudon County, Suwannee River Water Management District, Michigan EPA, and the US Forest Service.
- Won ERDAS' first Canadian Government contract. The award was for over \$1,000,000 for software and consulting services with the Canadian Ice Center.
- Managed ERDAS' winning effort for the Bureau of Land Management contract with IBM, including software evaluation tests. This was a 5-year system wide software, support, and services contract valued at over \$2,500,000.
- Managed ERDAS' winning effort with Naval Facilities (NAVFAC) contract. The CORDANT team of ESRI, Autodesk, ERDAS, and others were able to share in a contract slated originally for Intergraph alone. After the award, was able to add additional support services to CORDANT in support of ERDAS software. Also assisted in the proposal and evaluation testing for the SASS contract managed by BDM. This was the first DOD intelligence contract that acquired commercial-off-the-shelf (COTS) remote sensing software.
- At NUS Corporation, a major consulting company to the utility market, developed new markets and clients for environmental applications with revenues over \$2,000,000 of GIS services. This included US Department of Energy, US Bureau of Recreation, Virginia Power, Tampa Bay Regional Planning Commission, Maryland Department of State Planning, and the Office of the President's Council on Environmental Quality.

- Managed development of over 20 GIS databases for such areas as the Kennedy Space Center, Suwannee River Water Management District, Tampa Bay, Southeast Central Oklahoma, Northern Virginia and a 4500 acre new town in Austin Texas. These include producing landcover classification for over 100,000 square miles using Landsat imagery.
- Acquired and set-up GIS capabilities at The Ohio State University and NUS Corporation.

### **Professional Presentations**

- From 1982 to 2000 made over 60 presentations on land use issues, image processing and GIS applications to groups including the ERDAS User Conference, the ESRI User Conference, GIS/LIS, ISPRS, ASPRS, ACSM, AM/FM International, URISA, APA, ASLA, US Army Corp of Engineers, NASA, NOAA, FEMA, USDA and USFS.
- Testified before US Congressional Science Committee on June 26, 1991 and presented at the Congress' Office of Technology Assessment Workshop on May 20, 1992 concerning commercial applications of government satellite imagery.
- At the invitation of the US State Department presented at the United Nations sponsored Rio Global Forum in 1992.

### **Service**

- Booster Head, Milton High School Wrestling Team, 1997 to 2000
- Volunteer, Milton High School Cross Country Team, 1994 to 2000
- Clemson University Parents Advisory Council. 1997 to 1998
- President, Tuxford Homeowner Association, 1996 to 1998
- Assistant Manager, Wills Park Youth All-star baseball team, 1994 to 1995
- Member, Montgomery County-Germantown Community Board, MD, 1986 to 1989
- Vice President, Germantown Estates Homeowner Association, MD, 1984 to 1986
- Advisor on Environmental Issues to John Anderson's Presidential Committee, 1980.
- Representative, Ohio Assembly on Land Use, 1979
- Chairman of the Legislative Liaison Committee, Ohio Chapter, ASLA, 1977-78.
- Member, Board of Zoning Appeals for Grandview Heights, 1979-82.
- Member, Loeb Fellowship Selection Committee. Harvard Graduate School of Design, 1973 - 75.