Curriculum Vita

Jeff R. Wright

EDUCATION

Ph.D. The Johns Hopkins University, C.W.G Whiting School of Engineering, Department of Geography and Environmental Engineering, June, 1982.

MSE University of Washington, Department of Civil Engineering; Program in Water and Air Resources, Seattle, Washington, June, 1977.

BSE University of Washington, Department of Civil Engineering; Program in Water and Air Resources, Seattle, Washington, June, 1975.

BA University of Washington, Department of Speech Communication; Program in Social Psychology, Seattle, Washington June, 1975.

ACADEMIC APPOINTMENTS

University of California, Merced

Dean of Engineering, University of California, Merced, 2001 – present.

Campus Director, CITRIS Research Institute (Computer and Information Technology Research in the Interest of Society), 2001 – present.

Interim Dean, College I, UC Merced, 2004 – present.

Interim Director, UC Merced Energy Research Institute (MERI), 2004 – present.

Purdue University

Associate Dean of Engineering *(Research, Facilities Planning, & Diversity),* 2001.

Assistant Dean of Engineering *(Information Technologies & Diversity),* 1997 - 2001.

Professor of Civil Engineering, Purdue University, July, 1991 - 2001.

Director, Indiana Water Resources Research Center, June, 1989 - 2001.

Participating Faculty, Environmental Sciences and Engineering Institute, Purdue University, 1994 - 2001.

Participating Faculty, Graduate Program in Geographic Information Systems and Remote Sensing, Purdue University, August, 1985 – 2001.

Associate Professor of Civil Engineering, Purdue University, July, 1987 - July, 1991.

Visiting Researcher, Center for Advanced Decision Support for Water and Environmental Systems, University of Colorado at Boulder, 1989 - 1990.

Assistant Professor of Civil Engineering, Purdue University, September 1982 - July, 1987.

Research Assistant Professor of Civil Engineering, University of Washington, 1976 - 1978.

OTHER PROFESSIONAL APPOINTMENTS

Board of Directors; San Joaquin Valley Clean Energy Organization, appointed 2007.

Board of Directors; Castle Challenger Learning Center, 2003 – present.

Founding Editor-in-Chief, ASCE Journal of Infrastructure Systems, 1994 – 2001.

Member of the National Academy of Engineering Action Forum on Diversity, 1998 - 2004.

American Society of Civil Engineers; Task Committee on Diversity, 1999 - 2001.

American Society of Civil Engineers; Board Communications Committee, 1998 - 2000.

Member; American Society of Civil Engineering Management Group A, 1996 – 2000.

Associate Editor; American Society of Civil Engineers, Journal of Computing in Civil Engineering, 1990 – 1993.

Intern, Interstate Commission on the Potomac River Basin, Rockville, Md., 1979 - 1981.

Director of Documents, World Conference on the Human Environment, Swedish United Nations Association, Stockholm, March, 1972 - July, 1972.

AWARDS, RECOGNITION, AND HONORS

State of the Art Award, American Society of Civil Engineers, May, 2001.

Innovation Award, National Institutes for Water Research (NIWR), March 2001.

CYBERSTAR Finalist Award for Teaching Innovation, Indiana Association for Information Technologies, April, 2000.

Purdue University Teaching Academy, elected April, 1999.

Service to the Profession Award, Presented by the American Society of Civil Engineers, June, 1999.

Fellow of the Big Ten Consortium for Institutional Cooperation (CIC), elected 1997.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Society of Civil Engineers
American Society for Engineering Education
Chi Epsilon Honorary
ASEE Engineering Dean's Council
National Society of Black Engineers
Omega Rho Operations Research Honor Society
Regional Sciences Association
Sigma Xi Scientific Research Honorary
Society of Hispanic Professional Engineers
Society of Women Engineers
Tau Beta Pi Engineering Honorary
Women in Engineering Program Advocates Network

EVIDENCE OF TEACHING EXCELLENCE

Elected to the Purdue Teaching Academy 1999.

Initiated a university-wide program at Purdue for supporting engineering faculty use of the Internet in support of course design, development and implementation.

PI or Co-PI for competitive grants totaling nearly $1-million for course/curriculum development or mentoring.

CONTRIBUTIONS TO COURSE AND CURRICULUM DEVELOPMENT

University of California, Merced

Core 90X: Freshman Seminar (Open Source Systems, You'll Be What You Write)
ENGR 97: Service Learning – Engineering Projects in Community Service (EPICS)
ENGR 191: Professional Seminar (for graduating seniors)
ENVE 140: Water Resources Planning and Management
ES 240: Water Resources Planning and Management

Purdue University

CE 392: Stochastic Concepts and Methods in Civil Engineering
CE 393: Civil Engineering Systems Analysis
CE 394: CE History, Ethics, Economic Analysis, and Case Studie
CE 495: Mathematical Modeling of Civil Engineering Systems
CE 497K: Computer Applications in Systems Engineer
CE 590: Water Resources Systems Engineering
CE 594: Economic Evaluation of Environmental Resources
CE 597F: Expert Systems in Transportation & Land Planning
CE 597I: Civil Infrastrcuture Systems Engineering
CE 597N: Internet Resources Design and Development
CE 597V: GIS in Civil Engineering
CE 597T: Advanced Internetworking Topics & Concepts
CE 645: Advanced Water Resources Systems

PUBLISHED WORK

Books

Civil and Environmental Engineering Systems (2nd Edition), ReVelle, C.S, Whitlatch, EA, and Wright, J.R., Prentice-Hall, (12004) ISBN: 0-13-047822-9.

Custom Edition: Civil and Environmental Engineering Systems, Wright, J.R., Prentice-Hall, (1998). ISBN: 0-536-01739-5

Civil and Environmental Engineering Systems, ReVelle, C.S, Whitlatch, EA, and Wright, J.R., Prentice-Hall, (1997) ISBN: 0-13-138678-6.

Edited Volumes

Expert Systems: Applications to Environmental Planning, J.R. Wright, L. Wiggins, R.K. Jain, and T.J. Kim (eds.), Springer-Verlag, March, 1993.

Digital Image Processing: Techniques and Applications in Civil Engineering, J.D. Frost and J.R. Wright (eds.), ASCE, July, 1993.

Proceedings of the 7th Annual Conference on Computing in Civil Engineering and Geographic Information Systems, Goodno, B.J. and Wright, J.R. (eds). ASCE, November, 1992.

Expert Systems: Applications to Urban Planning, T.J. Kim, L. Wiggins, and J.R. Wright (eds.), Springer-Verlag, December, 1989.

Regional Environmental Systems: Assessment of Research Applied to National Needs, Brian W. Mar and Jeff R. Wright (eds.) National Science Foundation, June, 1977.

Articles in Refereed Journals

Wallace, R.M., Zhang, Y., and Wright, J.R. "Distributed System for Coastal Infrastructure Modeling and Assessment," *ASCE Journal of Computing in Civil Engineering*, Vol. 15, No. 1, pp 67-73, 2001.

Iranpour, R., Stenstrom, M. G. Tchobanoglous, Miller, D., Wright, J.R. and Vossoughi, M. "Environhmental Engineering: Energy Value of Replacing Waste Disposal with Resource Recovery," *Science* Volume 285, pp 706-711, 1999.

Kandula, P. and Wright, J.R., "Designing Network Partitions to Improve Maintenance Routing," *ASCE Journal of Infrastructure Systems*, Vol. 3, No. 4, pp 160-169, December, 1997.

Chang, Y.C., Wright, J.R. and Engel, B.A., "Evidential Reasoning for Assessing Environmental Impact," *Civil Engineering Systems Analysis*, Vol. 14, pp 55-77, 1996.

Kandula, P., and Wright, J.R., "Optimal Design of Maintenance Districts," *Transportation Research Record*, No. 1509, pp 6-14, 1995.

Wang, J.Y., Kandula, P., and Wright, J.R., "Evaluation of Computer Generated Routes for Improved Snow and Ice Control," *Transportation Research Record*, No. 1509, pp 15-21, 1995.

Haslam, E.P., and Wright, J.R., "Indiana WETnet: A Virtual Water Resource," *Water Resources Update*, Number 99, pp 3-11, 1995.

Wang, J.Y., and Wright, J.R., "Interactive Design of Service Routes," *ASCE Journal of Transportation Engineering*, Vol 120, No. 6, pp 897-913, 1994.

Srinivasan, R., Engel, B.A., Wright, J.R., Lee, J.G., and Jones, D.D., "The Impact of GIS Derived Topographic Attributes on a NonPoint Source Pollution Model (AGNPS)," *Transactions of the American Society of Agricultural Engineers*, Vol 10, No. 4, pp 561-566,1994.

Wright, J.R. and Kosiba, E.D., "Assessing Alternatives for Automating District Office Administration," *Transportation Research Board*, No. 1305, pp 131-140, 1992.

Kosiba, E.D., Wright, J.R., and Cobbs, A.E., "Discrete Event Sequencing as a Traveling Salesman Problem," *Computers in Industry,* Vol. 19, No. 3 pp 317-327 1992.

Wright, J.R. and Wang, J.Y., "Integrating GIS and CAD for Transportation Route Design: PHASE I - Database Development," *Transportation Research Record No. 1304,* pp 212-218, 1992.

Haslam, E, and Wright, J.R., "Application of Routing Technologies to Rural Snow and Ice Control," *Transportation Research Record No. 1304,* pp 202-211, 1992.

Benabdallah, S. and Wright, J.R., "Multiple Subregion Allocation Models," *ASCE Journal of Urban Planning and Development*, Vol. 118, No. 1, pp 24-40, March, 1992.

Diamond, T.J. and Wright, J.R., "An Implicit Enumeration Technique for the Land Acquisition Problem," *Civil Engineering Systems*, Vol. 8, pp 101-114, 1991.

Buehler, K.A., and Wright, J.R., "A Bayesian Reasoning Shell for Land Management Part I: Structure & Function," *Journal of Computing in Civil Engineering*, ASCE. (3)2, pp 267-282, July, 1991.

Buehler, K.A., and Wright, J.R., "A Bayesian Reasoning Shell for Land Management Part II: Implementation," *Journal of Computing in Civil Engineering*, ASCE.(3)2, pp 283-299, July, 1991.

Benabdallah, S. and Wright, J.R. "Shape Considerations in Spatial Optimization," *Civil Engineering Systems Analysis*, Vol. 8, pp 145-151, 1991.

Engel, B.A., Jones, D.D., and Wright, J.R., "Selection of an Expert System Development Tool," *AI Applications in Natural Resource Management*, Vol. 5, No. 1 1991, pp 15-22.

Wright, J.R., Benabdallah, S., and Engel, B.A., "A Normalized User Interface for the Storm Water Management Model," *AI Applications in natural Resource Management*, Vol. 4, No. 2, pp. 11 - 16, 1990.

Randall, D., Houck, M.H. and Wright, J.R., "Drought Management of an Existing Water System", *Journal of Water Resources Planning and Management*, ASCE, Vol. 116, No. 1, pp 1-20, January, 1990.

Wright, J.R. and Skibniewski, M., "A Graduate Course Expert Systems Prototype Development," *International Journal of Applied Engineering Education*, Vol. 6, No. 2, pp. 233 - 242, 1990.

Armijos, A., Wright, J.R. and Houck, M.H., "Bayesian Inferencing Applied to Real-time Reservoir Operations and Management," *ASCE Journal of Water Resources Planning and Management*, Vol. 116, No. 1, pp 38-51, January, 1990.

Diamond, J.T. and Wright, J.R., "Efficient Land Allocation," *Journal of Urban Planning and Development*, ASCE, Vol. 115, No. 2, pp 81-96, Sept. 1989.

Sheer, D.P., Baeck, M.L., and Wright, J.R., "The Computer as Negotiator," *Journal of the American Water Works Association*, Vol. 81, No. 2, pp 68-73, 1989.

Jacobs, T., Wright, J.R. and Cobbs, A., "Optimal Inter-process Steel Production Scheduling," *Computers in Industry*, Vol. 15, No. 6, pp 497-508, 1988.

Houck, M.H., Wright, J.R., Diamond, J.T., and Toft, G., "Planning Indiana's Water Infrastructure from a Competitive Perspective," *Water Resources Bulletin*, American Water Resources Association, Vol. 24, No. 3, pp 651-659, June, 1988.

Diamond, J.T. and Wright, J.R., "Design of an Integrated Spatial Information System for Multiobjective Land-use Planning," *Environment and Planning -B*, Vol. 15, pp. 205-214, June, 1988.

Wright, J.R., Egly, S.E., and Berg, D., "Efficient Personnel Management for Winter Highway Maintenance," *Transportation Research Record* No. 1127, National Research Council, pp. 9-15, June, 1988.

Diamond, J.T. and Wright, J.R., "A Multiobjective Analysis of Public School Consolidation," *Journal of the Urban Planning Division*, ASCE, Vol. 113, No. 1, pp. 1-18, May, 1987.

Egly, S.E., and Wright, J.R., "A Microcomputer-Based Multiobjective Personnel Management Model," *Journal of Computing in Civil Engineering*, ASCE, Vol. 1, No. 2, pp. 114-127, April, 1987.

Wright, J.R., Houck, M.H., Diamond, J.T., and Randall, D., "Drought Contingency Planning," *Civil Engineering Systems*, Vol.3, pp. 210-221, December, 1986.

Randall, D., Houck, M.H., and Wright, J.R., "Simulating Water System Operation During Periods of Drought," *Journal of the American Water Works Association*, Vol. 78, No. 8, pp. 53-60, August, 1986.

Wright, J.R., Egly, S.C., and Gallivan, H.W., "A Multiobjective Model for Seasonal Personnel

Reassignment," *Civil Engineering Systems*, Vol. 3, pp. 16-21, March, 1986.

Wright, J.R., ReVelle, C.S., and Cohon, J.L., "A Multiobjective Integer Programming Model for the Land Acquisition Problem," *Regional Science and Urban Economics*, Vol. 13, pp. 31-53, 1983.

Kroll, P. and Wright, J.R., "SLIMS--A Microcomputer-based Information Management System for a Particular Cross Regional Comparison Application," *Journal of the Urban and Regional Information Systems Association*, pp. 83-94, August, 1983.

Mar, B.W. and Wright, J.R., "Exchange Mechanisms for Policy Analysis Games," *Simulation and Games*, Vol. 9, No. 4, pp. 393-412, December, 1978.

Articles in Refereed Books and Proceedings

Wright, J.R., Carpin, S., Cerpa, A., Gavilan, G., Kallmann, M., Laird, C, Larid, K., Newsam, S, and Noelle, D. "An Open Source Teaching and Learning Facility for Computer Science and Engineering Education," *Proceedings of the International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS)*, Las Vegas, Nevada, June, 2007.

Ritschel, A. and Wright, J.R. "Development of a Solar Energy Research and Test Center at the University of California, Merced," *Proceedings of the IEEE 4th World Conference on Photovoltaic Energy Conversion*, pages 2517-2519 Hawaii, June, 2006.

Driscoll, D.M., Kokini, K., Katehi, L. P.B., Wright, J.R., and Percifield, C.P., "A New Paradigm for Diversity in Engineering," Proceedings of the 2003 American Society of Engineering Education Annual Conference and Exposition, 8 pages, June, 2003.

Wright, J.R. and Houck, M.H., "Water Resources Planning and Management," in *The Civil Engineering Handbook (Second Edition)* (W.F. Chen and J.Y.R. Liew, eds.), ISBN-10: 0-8493-0958-1, 42 pages, 2003.

Wright, J.R. and Houck, M.H., "Chapter 39: Water Resources Planning and Management," in *The Civil Engineering Handbook* (W.F. Chen ed.), ISBN-10: 0-8493-8953-4, pages 39-1-39-18, 1995.

Daniels, Jane, and Wright, J.R., "Designing a More Inclusive Engineering Education," *Proceedings of the International Conference on Gender and Science and Technology*, Copenhagen, Denmark, 6 pages, July 2001.

Wright, J.R. Gavilan, G., Zhang, Y. and Redinbo, K., "Emerging Technologies for Developing Distributed Database Systems," *Proceedings of the ASCE 2000 Joint Conference on Water Resources Engineering and Water Resources Planning and Management*, pp 188-197, July, 2000.

Franks, S., Gallagher, Wright, J.R., Daniels, J.Z., and Tietjen, J.S., "Designing Engineering and Science Education for the 21st Century," *Proceedings of the WEPAN 2000 National Conference: Creating a New Vision in the 21st Century*, pp 93-98, June, 2000.

Gavilan, G. and Wright, J.R., "Optimal Design of Groundwater Monitoring Networks," *Proceedings of the 26th ASCE Water Resources Planning and Management Division Specialty Conference*, 8 pages, June, 1999.

Lemer, A.C., and Wright, J.R., "Developing a Comprehensive Infrastructure Management System," *Proceedings of the 103rd American Public Works Association Congress on Innovations in Infrastructure Management*, Minneapolis, September, 1997.

Wright, J.R. "An Efficient Algorithm for Solving the Region Aggregation Problem," *Proceedings of the 2nd International Conference on Digital Image Processing in Civil Engineering*, Davos, Switzerland, 14 pages, June, 1997.

Wright, J.R. and Houck, M.H., "Chapter 37: Water Resources Planning and Management," in *The Civil Engineering Handbook* (W.F. Chen, ed.), pages 1166 - 1183, 1995.

Wright, J.R., "Integrating Spatial Network Data and Operations Research Methodologies for Improved Transportation Network Maintenance," *Proceedings from the NSF/Korean Symposium on IVHS & TIS in Transportation*, 20 pages, 1994.

Wang, J.Y., and Wright, J.R., "Route Design and Management," *Geographic Information Systems in Transportation*, Rutgers University Press, 1994.

Wright, J.R., Want, J-Y, and Haslam, E.P., "A Spatial Decision Support System for Vehicle

Routing, "P*roceedings fot he 5th International Conference on computing in Civil and Building Engineering*, ASCE, 8 pages, New York, June, 1993.

Wright, J.R., "Teaching Expert Systems Prototyping at Purdue," Chapter 9 in *Expert Systems for Civil Engineers - Education*, S. Mohan and M.L. Maher (eds.), ASCE Monograph, Spring, 1989.

Kroll, P. and Wright, J.R., "A Microcomputer-based Information Management System for Cross Regional Comparison," *Proceedings of the Urban and Regional Information Systems Association,* 11 pages, Atlanta, August, 1983.

Editorials, Notes, and Discussions in Refereed Journals

Wright, J.R. "Internetworking and Lifeline Learning," A*SCE Journal of Water Resources Planning and Management*, Vol. 126, No. 1, pp 1-3, 2000.

Wright, J.R. "Introducing the ASCE Journal of Infrastructure Systems," ASCE Journal of Infrastructure Systems, Vol. 1, No. 1, pp 1-2, 1995.

Wright, J.R., "GIS and Civil Engineering," *ASCE* J*ournal of Computing in Civil Engineering, V*ol. 7 No. 3, pp 257-260, July, 1993.

Book Chapters and Invited Contributions to Books

Wright, J.R., "Building the School of Engineering," Chapter 4 in From Rangeland to Research University: *The Birth of the University of California, Merced*, K. Meritt and J.F. Lawrence (eds.), Wiley, Fall, 2007.

Wright, J.R., and Buehler, K.A., "Probabilistic Inferencing and Spatial Decision Support Systems," Chapter 6 in *Expert Systems in Environmental Planning and Engineering*, J.R. Wright, L.Wiggins, R.K. Jain, and T.J. Kim (eds.), Springer-Verlag, Fall, 1992.

Wright, J.R., "Integrating Multiobjective Optimization and Knowledge-Based Systems in Land Allocation Models," Chapter 3 in E*xpert Systems: Applications to Urban Planning*, T.J. Kim, L. Wiggins, and J.R. Wright (eds.), Springer-Verlag, December, 1989.

Other Proceedings Articles

Benitez, P., Winston, R., Diaz, G., Reed, L., Cisneros, J., Tovar, F., Ritschel, A. and Wright, J. "Novel high-concentration mirror-based Kohler Integrating system for tandem solar cells," *Poster presentation at the IEEE 4th World Conference on Photovoltaic Energy Conversion, Hawaii*, June, 2006.

Wright, J.R., "Tilting the Bowl: Changing Institutional Culture Towards Diversity," 2000 National Meeting of the Women in Engineering Programs & Advocates Network (WEPAN), 6 pages, April, 2001.

Wright, J.R., A Distributed Database for Journal Management," *Proceedings of the WebNet2000 World Conference* , San Antonio, TX, 7 pages, October, 2000.

Wallace, R., Wright, J.R., and Zhang, Y. "A Demonstration Coastal Information System for Indiana," *Proceedings of the 26th ASCE Water Resources Planning and Management Specialty Conference*, June, 1999.

Wright, J.R. "Too Much Technology; Too Fast?" *Proceedings of the Water Resources and Urban Development Joint Specialty Conference, ASCE*, 6 pages, June 8, 1998.

Wright, J.R. "Experiences with Asynchronous Learning Tools," *Proceedings of the Water Resources and Urban Development Joint Specialty Conference, ASCE*, June, 1998.

Uber, J., Grayman, W., and Wright, J.R., "Water Resources Planning & Management Information Systems," *Proceedings of the ASCE Water Resources Planning and Management Division Specialty Conference*, 5 pages, June, 1996.

Kandula, P., and Wright, J.R. "Application of Partitioning Models to Address Location Issues," *Proceedings of the 42nd North American Meeting of the Regional Science Association, International*, Cincinnati, 9 pages, November, 1995.

Kandula, Pl and Wright, J.R., "Network Partitioning for Improved Route Design," Proceedings of the 41st North American meeting of the Regional Science Association, International, 9 pages, Niagra Falls, Ontario, Canada, November, 1994.

Wright, J.R., "Multiobjective Region Aggregation with Shape Considerations," *First*

International Engineering Foundation/NSF Conference on Image Processing in Civil Engineering, Kona, Hawaii, , 8 pages, March 1993.

Wright, J.R., "Automating the Design of Service Routes," *Proceedings of the 34th International Conference Highway Engineering*, 32 pages, September, 1992.

Lutz, C.H., Dillon, T.M., Houck, M.H., and Wright, J.R., Interpreting Dredge Material Bioassay Data--COBIAA," *Water Forum '92, Annual conference of the Water Planning and Management Division, ASCE*, pates 108-113, August, 1992.

Wright, J.R., "A Computer Aided System for Planning Efficient Routes,"*Geographic Information Systems (GIS) for Transportation*, Portland, OR., March, 1992.

Wang, J.Y., and Wright, J.R. "Advanced Technologies for Transportation Route Design," *ASCE 8th Conference on Computing in Civil Engineering*, Dallas, June, 1992.

Wright, J.R. "Route Planning and Management: Applications to Transportation Systems Management," *Managing Snow and Ice Control Operations*, pages 23-24, Madison, WI, September, 1991.

Wright, J.R., "GIS Data Structures for Advanced Computer Technologies," *TUNGIS '91: An International Seminar on GIS*, Tunis, Tunisia, September, 1991.

Wright, J.R. and Wang, J.Y., "Emerging Technologies for Water Resources Modeling: New Tools and Challenges for the Classroom,? International conference on Computer Applications in Water Resources, 10 pages, Taiwan, July, 1991.

Wright, J.R., and Haslam, E., "Application of Routing Technologies to Rural Snow and Ice Control," *70th Annual Meeting of the Transportation Research Board*, Washington, D.C., January, 1991.

Wright, J.R., "Personnel Management for Winter Operations: A PC-based Decision Support System," *70th Annual Meeting of the Transportation Research Board*, Washington, D.C., January, 1991.

Kosiba, E.D., and Wright, J.R., "Facility Location Models for Cooperative Foundry Wast Reclamation," *ORSA/TIMS Joint National Conference, Philadelphia*, October, 1990.

Wright, J.R., "Advanced Spatial Decision Support Systems in Water Resources Research," *Specialty Conference on Irrigation and Drainage and Watershed Management* Symposium, 12 pages, Drango, CO, July, 1990.

Wright, J.R. and Henry, R.H., "Computer Futures in Civil Engineering Education," *1990 Educational Forum*, Las Vegas, 8 pages. April, 1990.

Wright, J.R., "The Role of Raster-based GIS in Water Resources Systems Analysis," *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 145-148, Sacramento, May, 1989.

Wright, J.R., "Electronic Communications in Water Resources Systems," *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 59-62, Sacramento, May, 1989.

Armijos, A. and Wright, J.R., "Bayesian Inferencing Applied to Real-time Reservoir Operations, 16*th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 485-488, Sacramento, May, 1989.

Jacobs, T.L. and Wright, J.R., "Strategies for Urban Drainage Infrastructure Rehabilitation, *16th Annual national Specialty Conference*; ASCE Water Resources Planning and Management Division, pages 107-110, Sacramento, May, 1989.

Engel, B.A., Jones, D.D., and Wright, J.R., "Selection of an Expert System Development Tool, "Proceedings of the 1998 Summer Meeting of the American Society of Agricultural Engineers, 7 pages, Rapid City, SD, June, 1988.

Wright, J.R., "Engineering Workstations for Civil Engineers, "Proceedings of the 5th Conference on Computing in Civil Engineering: Microcomputers to Supercomputers, ASCE, pages 62-69, Alexandria, VA., March, 1988.

Wood, D.M. and Wright, J.R., "Calibrating Complex Simulation Models using Rules-based Inferencing," Proceedings of the 1988 Multiconference on Computing in Civil Engineering, pages 256-261, San Diego, February, 1988.

Rendall, D., Houck, M.H., and Wright, J.R., "Policy Screening Models for Water Supply

Operations," *Proceedings of the American Society of Civil Engineers Conference: Water Forum '86—World Water Issues*, pages 1912-1919, Long Beach, August, 1986.

Wright, J.R., and Houck, M.H., "An Application of Systems Modeling in Steel Production Scheduling," *Proceedings of the Fourth International Conference and Exhibition on Engineering Software*, Pages 15/127 – 15/140, London, England, June, 1985.

Randal, D., Houck, M.H., and Wright, J.R., "Building a Water Supply Optimization Model for Indianapolis," *Proceedings of the International Symposium on Urban Hydrology, Hydraulics, and Sediment Transport*, pages 39-46, Lexington, KY, July, 1984.

Wright, J.R., Houck, M.H., and Randall, D., "Comparison of Mathematical Programming Packages," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 350 – 354, San Diego, April, 1984.

Wright, J.R., "Computer Literacy for Civil Engineers," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 143 – 149, San Diego, April, 1984.

Wright, J.R., and Kroll, P., "Rigid Format Database Management Using Microcomputers," *Proceedings of the American Society of Civil Engineers Third conference on Computing in Civil Engineering*, pages 449 – 458, San Diego, April, 1984.

Wright, J.R., "The Trouble with Computers," *Proceedings of the 70th annual Road School, pages 125-129*, Purdue University, March, 1984.

Wright, J.R. "The Acquisition of Recreational Lands Using Multiobjective Integer Programming," *1983 Symposium on Leisure Research*, pages 234 - 241Kansas City, October, 1983.

Houck, M.H., and Wright, J.R., "The Use of Cumulative Distribution Functions in Water-energy Real-time Operating Models," *Joint National Meeting of the Institute for Mangement Science and Operations Research Society of America*, pages 331-339, Chicago, April, 1983.

INVOLVEMENT IN GRADUATE RESEARCH

Major Professor for Completed Theses and Dissertations

Year	Student	Degree	Thesis/Dissertation Title
2003	J.K. Hou	Ph.D.	Client/server Architecture for Distributed Infrastructure Modeling
2002	R. Wallace	Ph.D.	Region Aggregation Modeling using Circle Packing
2001	P. Johnson	Ph.D.	Civil Infrastructure Policy, Planning and Management
2001	Y. Zhang	Ph.D.	Distributed Spatial Environmental Modeling
2001	F. A. Bonilla	Ph.D.	Perturbation Techniques in Stochastic Hydrology
2000	C. Engstrom	MSCE	Systems Engineering
1999	G. Reid	MSCE	Coastal Engineering and Management
1999	H. Gavilan	Ph.D.	GIS in Water Resources Planning and Management
1999	D. Medema	MSCE	Civil Infrastructure Systems Analysis
1998	C-I. Yen	MSCE	Automating Region Aggregation Model using GIS
1997	P. Johnson	MSE	Relationship Between Infrastructure Investment and Economic Status
1996	P. Kandula	Ph.D.	Location, Allocation, Routing Models
1995	Y.C. Chang	Ph.D.	An Efficient Heuristic for Solving the Region Aggregation Problem
1995	J. Miedema	MSCE	Assessing the Value of Information for Improved Winter Network Maintenance Management
1993	E. Markstrom	MSCE	Expert Systems for Environmental Operations Management
1993	J.C. Kilburn	MSCE	Predicting Space Shuttle Launch Blast Emissions

1992	J-Y Wang	Ph.D.	Multiobjective Route Design and Analysis
1992	B. Nicholson	MSCE	Multiobjective Analysis of Infrastructure Maintenance
1991	Y.C. Chang	MSCE	A Dempster-Shafer Shell for Spatial Indexing
1991	E.D. Kosiba	Ph.D.	Locating Shared Production Facilities on a Network
1990	K.A. Buehler	MSCE	A Bayesian Indexing Scheme for Land Management
1990	S. Benaballah	Ph.D.	Multiobjective Morphological Modeling
1989	D. Hickey	MSCE	Goundwater Pollution Impact Prediction Using GIS
1989	T.L. Jacobs	Ph.D.	Multiobjective Rehabilitation Strategies for Dams
1988	E. Haslam	MSCE	The Application of Routing Technologies to Snow Removal
1988	P. Kurmas	MSE	Processing of Digital Line Graph Data for Engineering Management
1988	J.T. Diamond	Ph.D.	Multiobjective Discrete Optimization for Land Management
1987	S. Ditlinger	MSCE	Integrated Land Management
1986	G. Stukel	MSCE	A Database for Highway Maintenance Management
1986	E.D. Kosiba	MSCE	A Traveling Salesman Model for Discrete Event Sequencing
1986	S.C. Egly	MSCE	A Microcomputer-Based Linear Model for Personnel Mgmt.
1985	T.L. Jacobs	MSCE	Mathematical Modeling Applied to Production Scheduling
1985	J.T. Diamond	MSE	Multiobjective Analysis of Public School Consolidation
1984	N. Cullen	MSCE	Dynamic Simulation Modeling of Activated Sludge w/J. Alleman

GRANTS AND AWARDS FOR RESEARCH AND EDUCATION

Current and Recently Completed Grants (at UC Merced)

Sponsor/Period	Title / *(Involvement)*	Amount
PG&E Corproration Fall, 2007	Support for Establishing the California Solar Energy Testing Center – *Co-Author and PI w/Professor Winston*	$2,000,000
PG&E Corporation 10/07 – 12/12	Support for UC Merced Engineering Student Recruitment and Retention - *Author and PI*	$1,000,000
Kearney Foundation 7/07 – 6/12	A Salable Object Database for Distributed Document Management: Phase II – *Author and PI*	$148,494
Cal. Bay Delta Authority 1/04 – 6/07	Web Based Proposals, Submission, Review, and Management System – *Author and PI*	$384,413
Hewlett-Packard 8/05 - 12/07	Free and Open Source Software (FOSS) in Engineering *Author and PI*	$180,000
Cal. Bay Delta Authority 6/05 - 8/05	Online Submission System Technical Support *Author and PI*	$43,675
CALFED 5/04 – 4/05	Developing a Client-Server Architecture for Water Resources Proposals Management – Author and PI	$91,075
Cal. Bay Delta Authority 5/04 – 5/05	Design, Development, and Implementation of a Distributed Information for Proposal Management - *Author and PI*	$114,778
Foster Family Fall, 2005	Endowment to establish the UC Merced Engineering Service Learning Program – *Co-Author, Co-PI w/Prof. Leppert.*	$1,250,000
The Hewlett Foundation 1/03 – 12/07	Developing a Partnership with UC and Community College for Promoting Articulation – *Co-Author and Co-PI*	$600,000
Kearney Foundation 5/02 – 6/07	A Scalable Object Database for Distributed Document Management – *Author and PI*	$195,600

Past Grants (at Purdue University)

Sponsor/Period	Title / *(Involvement)*	Amount
Kearney Foundation 3/02 - 4/03	Design of a Distributed Object Database for Document Management - *Author and PI*	$58,000
National Science Found. *9/01 - 12/0*2	Program Extension for the Computer Science, Engineering, Mathematics (CSEMS) Scholars Program – *Co-Author, Co-PI*	$132,000
U.S. Geological Survey 3//01 - 2/02	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$68,178
U.S. Geological Survey 9/00 - 10/01	An On-line Reporting System for the USGS Cooperative Research Units Program - *Author and PI*	$79,234
U.S. Geological Survey 3/99 - 3/00	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$68,178
U.S. Geological Survey 9/98 - 9/01	Development of an Intranet for the National Institutes for Water Resources - *Author and PI*	$51,000
National Science Found. 1/00 - 12/01	Experience High Achieving Students in Computer Science, Engineering and Mathematics - *Co-Author Co-PI*	$220,000
The GE Fund 9/99 - 8/02	Creating a Freshman Engineering Learning Community - *Co-Author, Co-PI*	$449,792
U.S. Geological Survey 3/99 - 2/00	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$85,000
The GE Fund 6/98-7/99	Learning Excellence: Transforming the Freshmen Engineering Experience – *Co-Author and Co-PI*	$165,000
National Science Found. 1/98 - 12/00	Internet 2 Connectivity for Purdue University - *Co-PI and Oversight Committee Chair*	$305,000
U.S. Geological Survey 1/98 - 2/99	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$85,000
Intel Corporation 8/97 - 8/01	Advanced Computation Modeling for Environmental and Natural Resources Protection - *Co-Author, Co-PI*	$250,030
Purdue University 1/97 - 1/98	Distance Learning Technology Development *Author and PI*	$30,000
In. Dept. of Env. Mgmt. 9/96 - 9/98	Indiana WETnet - Phase II: Distributed Modeling Methods *Co-Author, Co-PI*	$98,838
U.S. Geological Survey 7/97 - 6/98	Annual Water Resources Research Institute Program for Indiana - *Author and PI*	$82,000
Ind. Dept. Nat'l. Res. 9/96 – 9/98	Indiana WETNET: Phase II Distributed Modeling Methods Co-*Author and Co-PI*	$98,838
Ind. Dept of Natural Res. *7/96 - 8/98*	The Coastal Situation Report *Co-PI*	$75,000
Ind. Dept. of Natural Res. *7/96 - 1/98*	Design of a Coastal Spatial Information System *Author, PI*	$24,000
Purdue Res. Foundation 1/96 - 12/98	Integrated Infrastructure Management and Decision Support *Author and PI*	$20,400
City of Indianapolis 3/96 - 12/96	Integrated Infrastructure Management and Decision Support *Co-Author and PI*	$15,000
National Science Found. 10/95 - 9/98	Integrated Infrastructure Management and Decision Support *Co-Author and PI*	$99,546
U.S. Geological Survey 7/96 - 6/97	Annual Allotment for Water Resources Research - *Author and PI*	$20,000
Purdue Res. Foundation 8/94 - 12/94	Jump-Start Award for Interdisciplinary Research *Author and PI*	$17,700

U.S. Geological Survey 7/95 - 6/96	Annual Allotment for Water Resources Research *Author and PI*	$78,545
National Science Found. 6/94	International Travel Grant *Co-Author and Co-PI*	$1,8500
U.S. Geological Survey 7/94 - 6/95	Annual Allotment for Water Resources Research *Author and PI*	$101,348
Purdue Res. Foundation 6/94 - 6/94	International Travel Grant *Author and PI*	$1,500
FHWA, IDOH 1/94-6/95	Real-time models for Snow and Ice Control Operations *Author and PI*	$85,000
FHWA, IDOH 1/93-6/97	Multiobjective Arc-Partitioning *Author and PI*	$235,000
National Science Found. 7/92 - 3/94	Civil Engineering Exploration Curriculum – *Co-Author* *Co-Author and Co-PI*	$75,000
U.S. Geological Survey 7/93 - 6/94	Annual Allotment for Water Resources Research *Author and PI*	$105,274
Atlantic Richfield Co. 3/92 - 12/92	Expanding the Knowledge Base of an Oil Spill Remediation Expert System: REMEDIATOR II *Author and PI*	*$10,000*
FHWA, IDOH *1/92-12/92*	Implementation of the Computer Aided System for Planning Efficient Routes: CASPER - *Author and PI*	$74,258
Purdue Research Grant 1/92 - 7/92	Environmental Modeling in Northern Africa *Author and PI*	$2,500
U.S. Army WES 1/92 - 3/93	Expert Systems for Interpreting the Consequences of Bioaccumulation on Aquatic Animals*, Co-Author and Co-PI*	$85,000
U.S. Army CERL 3/92 - 5/92	Continuation of XGRASS - GIS Conceptual Design and Development - *Author and PI*	$14,945
U.S. Geological Survey 7/92 - 6/93	Annual Allotment for Water Resources Research *Author and PI*	$105,274
Bechtel Corporation 1986 - 1991 *(recurring)*	Systems Applications in CAD/CAE *Author and PI*	$12,000
U.S. Army CERL 7/91 - 6/92	Development of GIS Workshops and Documentation on Environmental Map Themes *Co-Author and PI*	$84,574
Showalter Trust Fund 4/91 - 3/92	Spatial Environmental Modeling *Co-Author and Co-PI*	$7,696
U.S. Army CERL 6/91 - 6/92	VIPER: Visual Interactive Policy Evaluation Routine *Author and PI*	$19,273
U.S. Geological Survey 7/91 - 6/92	Annual Allotment for Water Resources Research *Author and PI*	$105,274
U.S. Army WES 1/91 - 2/92	Bioaccumulation and Effects Assessment in Aquatic Biota Exposed to Contaminated Dredged Material – Co-Author, *PI*	$132,000
U.S. DOE 9/90 - 6/92	Environmental Restoration and Waste Management *Co-Author and PI*	$25,000
U.S. Army CERL 11/90 - 5/91	GIS Data Structures for Advanced GIS Technologies *Author and PI*	$25,650
U.S. Geological Survey 7/90 - 6/91	Annual Allotment for Water Resources Research *Author and PI*	$112,424
Argonne Laboratory 9/89 - 3/91	Energy, Economic and Technical Factors of Foundry Sand Recycling and Reclamation - *Co-Author and Co-PI*	$75,000
U.S. Army CERL 9/89 -12/91	Automated Management of Dredge Material Disposal *Author and PI*	$127,000
U.S. Army CERL	Development of Advanced Spatial Modeling Algorithms	$134,608

7/89 -8/91	*Author and PI*	
FHWA, IDOH 3/89-1/91	Multiobjective Service Route Design *Author and PI*	$143,510
Purdue Res. Foundation - 1989	XL International Travel Grant; Singapore, Shanghai *Author and PI*	$1,200
U.S. Army WES 10/88 – 12/90	Automating Dredge Material Disposal Management *Co-Author and Co-PI*	$120,000
National Science Found. 1989	International Travel Grant: Singapore, Shanghai *Author and PI*	$1,200
U.S. Army CERL 5/88 – 5/88	Evaluation of Multiobjective Land Management Models *Author and PI*	$11,803
Purdue University 1988	Creative Undergraduate Instruction *Co-Author and Co-PI*	$10,100
JHRP, INDOT 7/87 – 6/89	Development of a Prototype System for Show Route Design and Management – *Author and PI*	$23,308
U.S. Army CERL 6/88 - 9/91	Exceed $2,00,000 for research related to facilities planning and management in areas of GIS and spatial analysis - *PI*	Indef.
Bechtel Corporation 1986	Systems Applications in CAD/CAE *Author and PI*	$2,000
U.S. Army CERL 1/86-3/87	Division Support for Training Land Resource Utilization *Author and PI*	$49,950
INDOT/JRHP 3/86-2/87	Remote Office Automation Analysis *Author and PI*	$19,971
Purdue Res. Foundation 1986	Expert Systems int eh Planning and Design of Sewerage Systems Rehabilitation and Expansion – *Author and PI*	$13,200
U.S. Geological Survey 3/86-3/87	Development of an Expert System for Rehabilitation of the Urban Drainage Systems – *Co-Author and Co-PI*	$33,000
Purdue Res. Foundation 1985	International Travel Grant *Author and PI*	$6,500
U.S. Army CERL 1985	Optimization Methods and Systems analysis for Computerized Planning and Environmental Management – *Author and PI*	$14,915
U.S. Army CERL 6/85 - 7/87	The Integrated Training Lands Management System *Author and PI*	$67,136
INDOT/JHRP 6/84 – 8/86	Optimal Reassignment Strategics for Snow Personnel *Author and PI*	$22,103
U.S. Army CERL 8/84 - 7/85	Distributed Training Scheduling System Design *Co-author and Co-PI*	$24,787
U.S. Army CERL 1/84-6/85	Testing and Evaluation of the Division Gunnery Model *Author and PI*	$34,992
Purdue Res. Foundation 1994	A Multiobjective Integer Programming Solution to the Site Selection Problem – *Author and PI*	$13,200
U.S. Army CERL 7/83-6/84	Training Lands Systems Concepts *Author and PI*	$24, 678
Indiana WRRC 7/83 – 6/84	Developing a Drought Simulation Exercise *Co-Author and Co-PI*	$11,584
U.S. Army CERL 1983	Conceptual Design of a Training Lands Management System *Author and PI*	$12,667
Bethlenem Steel Corp. 1/83-6/86	Optimization Techniques Applied to Steel Production Scheduling – *Author and PI*	$32,500

SIGNIFICANT SCHOLARLY WEBSITES DEVELOPED

UC Merced *(authentication required)*

Interactive website and database for administering the proposal submission, review and management support system for the Kearney Foundation of Soil Science. The research prospectus of the Foundation may include work that leads to further understanding of mechanisms and processes governing carbon cycling processes and trace gas dynamics and the development of quantitative cause-effect relationships between identified soil C sequestration strategies and land use. In particular, there is a need to understand how processes are spatially and temporally distributed across diverse landscapes.

https://uckearney.org/2006/ *

Distributed information system for tdocument review and management support system of the CALFED Bay-Delta Program agencies through the California Bay-Delta Authority, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service receives, reviews, and makes awards for research projects that assist farmers in integrating agricultural activities with ecosystem restoration. The geographic area of interest is California's Sacramento River and San Joaquin River watersheds and the San Francisco Estuary.

http://www.calwater.ca.gov/Solicitation/index.htm *

Purdue University

Online Journals Management System for the ASCE Journal of Infrastructure Systems: http://bridge.ecn.purdue.edu/JIS/

Interactive Information Management Systems for the ASCE Water99-2002 Specialty Conference: http://www.ecn.purdue.edu/Water2002/

The Indiana Coastal Information System (Interactive surface transport model): http://www.ecn.purdue.edu/Coastal/

The SANTA personnel management model online: http://gunsmoke.ecn.purdue.edu/~yiguo/santa/

Online database and Intranet for the USGS Cooperative Research Units Program: https://Engineering.Purdue.edu/WRRC/CRUP_new/index_html

Online database and Intranet for the National Institutes for Water Resources: http://www.niwr.org/NIWR/

Multiobjective Network Arc Partitioning modeling tools: http://gunsmoke.ecn.purdue.edu/~wrightje/DropBox/Secure/molparcpart

Indiana Online Water Logs (Interactive datasource for Indiana water log data): http://WetNet.www.ecn.purdue.edu/WetNet/index-old.html

The Indiana Coastal Situation Report (State of the Indiana Lake Michigan shorelines): http://bridge.ecn.purdue.edu/~waterl

Indiana WETnet Water Resources Information Server: http://bridge.ecn.purdue.edu/WETnet/

Intranet for the Purdue/NSF Civil Infrastructure Systems Integrative Research Program: http://bridge.ecn.purdue.edu/~iims/

Purdue Schools of Engineering Diversity Forums Intranet and Database: http://webct.cc.purdue.edu/SCRIPT/DAC0101/scripts/serve_home

Online Interactive Region Aggregation and Land Leveling Modeling System: http://gunsmoke.ecn.purdue.edu/~yiguo/java/

Purdue Schools of Engineering Strategic Plan Collaborative Development System: https://Engineering.Purdue.edu/Engr/strategic_plan/

Interactive resource for teaching linear optimization: characterization of extreme points: http://gunsmoke.ecn.purdue.edu/~yiguo/ce597t/

Multiobjective linear optimization teaching tool--the region aggregation problem: http://gunsmoke.ecn.purdue.edu/~yiguo/acquisition/

National Institutes for Water Resources Proposal Submission system for the national grants program: http://www.niwr.org/NIWR/app/FY2000

INVITED PRESENTATIONS

"The Big Picture: Our Energy/Climate Challenge," Panel Presentation to the Clean Energy and Environment Roundtable; World Ag Expo, Tulare, Ca. February 12, 2008.

"The Hidden Challenge for Climate Change: U.S. Energy Workforce Retooling," *UC Merced Climate Change Teach-in*, January 31, 2008.

"Opportunities for Free and Open Source Software in Engineering Education," *A panel presentation at the third Annual Government Open Source Conference (GOSCON),* October 15-16, 2007, Portland, Oregon.

"The CITRIS Research Agenda at UC Merced," *Presentation to the CITRIS in London Symposium*, London, July 11-12, 2007.

"State of the State of Open Source," *Presentation to the California GTC West Conference on Open Source*, Sacramento, May 16, 2007.

"Open Source Development at UC Merced," Presentation to the Olliance Group 2007 Open Source ThinkTank, California Napa Valley, March 2007.

"Open Source Systems in Engineering at UC Merced," *Presentation to the Information Technologies Unit of the California Air Resources Board*, Sacramento, October 3, 2006.

"Changing the Face of Engineering Education," *A presentation to the Chicano-Latino Intersegmental Convocation Policy Summit*, Sacramento, August 18, 2006.

"Institutionalizing Service Learning: Our Experience at UC Merced," *A panel presentation at the National Conference on Engineering Service Learning: National Academy of Engineering*, Washington, D.C., May, 2006.

"Civic Engagement, the Undergraduate Academic Experience and Policy Implications," *Results from the University of California Undergraduate Experience Survey and the SERU21 Project*, Berkeley, June, 2005

"Engineering Education at UC Merced," *Presentation to the Tulare Educators*, Tulare, CA, March 29, 2005.

"Introducing the University of California at Merced," *Presentation to the faculty of the National Institute of Advanced Studies*, Bangalore, India, February 10, 2005.

"Building a Research University: The Engineering Perspective," *Presentation to the North Fresno Rotary Club*, Fresno, CA, January 20, 2005.

"Research and Education in Engineering at UC Merced," *Luncheon Presentation to the Groundwater Resources Association: Arsenic in Groundwater,* October 19, 2004.

"Introducing UC Merced and our Energy Initiative," *Presentation to the faculty and administration of Modesto Junior college*, Modesto, September 17, 2004.

"Perspectives on Diversity in Research Universities," Presentation during the Richard Tapia Celebration of Diversity in Computing, Atlanta, October 16, 2003.

"Impact of Service Learning on Participation of Women in Engineering," *2003 National Conference of the Society of Women Engineers*, Birmingham, AL, October 9, 2003.

"Planning for Diversity in Engineering Education, " *Presentation to the 2003 SACNAS National Conference, 30th Anniversary Meeting*, Albuquerque, NM, October, 2003.

"Women in Engineering at UC Merced: Our Focus and Direction," *Luncheon presentation to the 2003 Joint Regional ABJ Meeting of the Society of Women Engineers*, Reno, Nevada, September 13, 2003

"The Potential for Optimization Models to Assist with Ballast Water Discharge Operations," *Presented to the NSF Workshop on Controls for Ballast Water Discharge: Developing Research Needs*, Seattle, April, 2003.

"Computer Science and Engineering at the UC's 10th Campus," *Presentation to the CITRIS Corporate Founding Members*, Palo Alto, February 27, 2003.

"The UC Merced Vision for Diversifying Engineering," *Invitational Conference on Gender Equity in Engineering Education: Towards Gender Equity in Engineering Education*, National Academy of Engineering, Washington, January 15, 2003.

"Starting from Scratch: Building the School of Engineering at UC Merced," *Presentation to the American Society of Engineering Education 2002 Conference and Exhibition*, Montreal, Canada, June, 2002.

"Mainstreaming Diversity into Engineering," *SWE Regional Conference: mainstreaming Divesity Into Engineering*, Davis, CA., February, 2002.

"Diversity in Engineering at UC Merced," Presentation to the Action Forum on Diversity in the Engineering Workplace: 7th Meeting, National academy of Engineering, Irvine, CA., January 23, 2002.

"Best Practices – The Hard Stuff," *Panelist during the National Academy of Engineering Best Practices in managing Diversity Symposium*," National Academy of Sciences, Washington, D.C., October 29, 2001.

"Changing Institutional Culture Toward Diversity," *A panel presentation at the combined national meeting of the National Association of Minority Engineering Program Administrators (NAMEPA) and the Women in Engineering Programs and Advocates Network (WEPAN)*, Alexandria, VA., April, 2001.

"Client/server Information Management for Technical Proposal Management," *Demonstration to the CALFED Water use Efficiency Grants and Loans Working Group*, Sacramento, October 20, 2000.

"Emerging Technologies for Developing Distributed Database Systems for Conference Management," American Society of Civil Engineers *Water Resources Specialty Conference: Building Partnerships*, July 30 - August 2, Minneapolis, 2000.

"The Challenges of Designing Engineering and Science Education for the 21st Century: A Panel Discussion," *2000 National Meeting of the Women in Engineering Programs & Advocates Network*, June 25-27, Washington, D.C., 2000.

"Collaboration Technologies," *Presented to the ASCE Board Communications Committee and ASCE staff*, Reston, VA, November, 1999.

"Engineering Diversity Initiatives," *Presented to the GE Workshop on Pathways to Academia's Future, Purdue University*, Fall, 1999.

"The Business of Diversity: A Panel Discussion," A workshop sponsored by the *National Academy of Engineering and the National Science Foundation*, October, 1999

"Educational Middleware for Distance Education," *Surveying and Mapping Educators Conference: Teaching the Teacher*, Purdue University, July 10-14, 1999.

"Growing Old Digitally," *Featured Presentation: Proceedings of the 26th ASCE Water Resources Planning and Management Division Specialty Conference,* June 6-9, Tempe, Arizona, 1999.

"Interfacing Applications using Client/Server Technologies," *26th Annual Specialty Conference of the Water Resources Planning and Management Division*, June 6-9, Tempe, Arizona, 1999.

"Future Opportunities for Engineering Research via Internet 2," *Panel Presentation; CAUSE'98 Conference on the Networked Academy*, Seattle, December, 1998.

"Engineering Economic Analysis for the EIT," *EIT Review Tutorial Series, Purdue University*, November, 1998.

"Adaptive Learning using Modern Distributed Database Technologies," *Panel Presentation, WebNET World Conference'98*, Orlando, November, 1998.

"Using Distributed Database Technologies for Evaluating the impact of Engineering Education," *Panel Presentation, 2nd Conference on Global Engineering Education*, Crystal City, November, 1998.

"The Future of Information Technology in Infrastructure Engineering," *George Mason University USE Distinguished Speaker Series*, October 26, 1998.

"Distributed Information Technologies for Managing Environmental Information," *Universities Council on Water Resources; National Institutes for Water Resources Board*

of Direction Meeting, Hood River Oregon, August, 1998

"Using Interactive Spreadsheet Models for Teaching Engineering Economic Analysis," *Tuck School of Management*, Dartmoth College, June 27, 1998.

"Teaching Internet Courses: the Good, the Bad, and the Ugly," *Multimedia Instructional Development Center's Seminar Series, Purdue University*, April, 1998

"Teaching, Learning and Technology Showcase: Panel on Future Visions," *Purdue University*, March, 1998

"Developing a Comprehensive Infrastructure Management System," *Presentation with Andrew C. Lemer to the 103rd Congress of the American Public Works Association*, Minneapolis, Mn. September, 1997.

"The Global Internet," *Presentation at ExpoCad 97,* San Jose Costa Rica, September 1997.

"Internetworking Tutorials," *Presented to at the annual specialty conferences of the ASCE Technical Council on Computer Practices and the Water Resources Planning and Management Division*, Houston, August, 1997.

"Customizing the Internet: What's possible now? What's on the Horizon," *Keynote presentation to the meeting of the combined American Society of Civil Engineers TAC/PAC/EdAC Leadership Luncheon*, Philadelphia, July, 1997.

"Internetworking Tutorial," *Presented at the 4th Congress on Computing in Civil Engineering*, Philadelphia, June, 1997.

"Using the Internet for Distance Modeling," *2nd International Conference on Digital Image Processing in Civil Engineering, Davos*, Switzerland, June, 1997.

"Internetworking to Enhance Personal and Professional Productivity," *Tutorial Presented at the 24th Annual Water Resources Planning and Management Division Conference*, Houston, April, 1997.

"Has Anybody Seen the Puck?" *Presentation to the faculty; George Mason University's Program for Civil, Environmental and Infrastructure Engineering*, April, 1997.

"Basics of Engineering Optimization," *Presented to the 1997 Prudue Road School*, with Professors Tarko, Peeta, and Abraham, March, 1997.

"Internetworking for Engineering Professionals: A Tutorial," *ASCE Computing Congress, Atlanta*, June, 1996.

"Internetworking for Water Professionals," *ASCE Specialty Conference of the Water Resources Planning and Management Division, Boston*, May, 1996.

PROFESSIONAL SOCIETY RESPONSIBILITIES

Current Activities

Member of the Editorial Board; American Society of Civil Engineers Journal of Infrastructure Systems, 2001 – present

Member of the Committee on Data Management and Analysis, Dean's Council of the American Society of Engineering education

Past Activities

Member of the National Academy of Engineering Forum on Diversity, 1998 - 2004.

Founding Editor-in-Chief of the Journal of Infrastructure for the American Society of Civil Engineers, 1990 – 2001

Member of the Board Communications Committee for the American Society of Civil Engineers.

Member of the Board-level Task Committee on Diversity for the American Society of Civil Engineers.

Appointed to the ASCE Technical Activities Committee Task Committee on Reclustering, October, 1996.

Management Group A Contact, American Society of Civil Engineers.

Member: Environmental and Water Resources Institute (EWRI) of the ASCE.

Member: Water Resources Planning and Management Division (WRPMD) of ASCE.

Member: Technical Council on Computer Practices (TCCP) of the ASCE.

Editorial Board, *Publics Works Management and Policy*, Sage Publications, 1995 – 2001.

PARTICIPATION IN OUTREACH, WORKSHOPS, AND SHORT COURSES

"The National Society of Black Engineers Career Fair Presentations," *Sponsored by NSBE*, Indianapolis, IN, April 21, 2000.

"24th Annual Graduate Education for Minorities (GEM), *Annual Board Meeting*," Washington, D.C., May, 2000.

"Workshop 2000: A National Dialogue to Increase Minority Participation in Science, Engineering and Math," Atlanta, GA, February 24-26, 2000

"GE Faculty for the Future Workshop: Pathways to Academia's Future," West Lafayette, IN, Nov., 1999.

"The Summit on Women in Engineering," *National Academy of Engineering*, Wash., D.C., May 17-18, 1999.

"New Integrations of Research, Scholarship and Undergraduate Education," *Best Practices Workshop*, University of Michigan, Ann Arbor, March 30, 1999.

"The National Society of Black Engineers Career Fair Presentations," *NSBE*, Kansas City, March 27, 1999.

"GE Change Acceleration Process (CAP) Workshop," *A Joint Endeavor of Purdue University and the GE Fund*, West Lafayette, IN, March 2-3, 2999.

"Continuing the Journey," *Purdue Engineering Workshop on Diversity*, August, 1999.

"Integrated Infrastructure Decision Making," A workshop sponsored by the National Science Foundation to develop future research strategies for civil infrastructure, Washington, July 15-17, 1998.

"Improving Proposal Success Ratio." *A workshop sponsored by the National Science Foundation*, Washington, D.C., November 15-16, 1997.

CITATIONS AND BIOGRAPHICAL LISTINGS

Who's Who in the World

Who's Who in America

Who's Who in the Midwest United States

Who's Who Environmental Registry

American Men and Women of Science

International Directory of Distinguished Leadership

Who's Who in American Education

Who's Who in Finance & Industry

International Who's Who of Professionals

Stathmore's Who's Who

UNIVERSITY SERVICE

University of California System

Intercampus Advisory Board Representative to the UC Infrastructure Institute (MRU), appointed July, 2007.

ITR Review 15-year Committee Chair.

Chair; UC Committee on Engineering Education (2006 – present).

Intercampus Advisory Board Representative to the UC Energy Institute (UCEI) July, 2007 – June, 2010.

University of California, Merced

UC Merced Director; California Center for Information Technology Research in the Interest of Society (CITRIS).

Interim Dean of College I.

Interim Director, UC Merced Energy Research Institute.

Author of the UC Merced non-commercial FM radio station permit application to the FCC

Chair; Academic Space Committee.

Student Chapter Advisor; Engineers Without Borders.

Student Chapter Advisor; National Society of Black Engineers (NSBE).

Numerous planning and policy making committees.

Purdue University

Primary responsibility for research programming and planning within the Schools of Engineering at Purdue.

Primary responsibility for space management within the Purdue Schools of Engineering.

Primary responsibility for facilities planning for major (50%) capacity expansion within the Purdue Schools of Engineering.

Responsibility for diversity initiatives within Purdue Schools of Engineering at Purdue, and liaison with national diversity efforts within the engineering community.

Responsibility for comprehensive strategic planning within Engineering, and coordination with university level strategic planning efforts across the Purdue campus.

Member of the Primary Committee of the School of Civil Engineering (1991 – 2001)

Elected by the faculty of the School to the Area Promotions Committee (1995-98)

Founding member of the Martha Dick Stevens Graduate Fellowship Committee

Member/contributing author: Purdue North Central Accreditation Planning and Response Committee (AY'98)

Chairperson; High-performance networking Subcommittee of the Purdue Research Computing and Communications Advisory Committee (1997-2001)

Member of the Purdue Information Access Policy Committee (1996-98)

Member of the Purdue University Computing Center Review Committee (1998-99)

Member of the Purdue Distance Learning Advisory Board (1997-00)

Member of the search advisory committee: Purdue Environmental Sciences & Engineering Institute

COMMUNITY AND REGIONAL SERVICE ACTIVITIES

Current Activities

Board of Directors; San Joaquin Valley Clean Energy Organization (SJVCEO, appointed 2007.

Board of Directors; Castle Challenger Learning Center, 2003 – present.

Central Valley Salinity Policy Group (CVSPG).

Central Valley Policy Group Technical Advisory Committee of the Central Valley Regional Water Quality Control Board.

Interagency Task Force for SanJoaquin Valley (Energy Policy and Technology Committee).

Committee Member: GVC Agri-food Informatics Institute Planning Committee.

Previous Activities

Board of Directors; Purdue Employees Federal Credit Union, March, 1993 - March, 1999.

Purdue Employees Federal Credit Union Assets and Technologies Committee.

West Lafayette School Corporation Math Textbook Adoption Committee, 1991-1994.

Chief Judge for Physical Sciences, Regional Science Fair (1986-1992).

Little kids baseball coach (1985-1991).