

Curriculum Vitae – Dr. Joshua Allen Joseph, Jr.

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Baton Rouge, Louisiana 70898

cell:
email:

EDUCATION – *BRIEF*

2008 – Doctorate of Philosophy – <u>Virginia Polytechnic Institute & State University</u>	<i>Civil & Environmental Engineering</i>
2008 – Future Professoriate Graduate Certificate – <u>Virginia Polytechnic Institute</u>	<i>The Graduate School at Virginia Tech</i>
2000 – Post-Masters Certificate – <u>The Johns Hopkins University</u>	<i>Environmental Engineering & Science</i>
1996 – Masters of Public Policy – <u>Harvard University</u>	<i>Environment & Natural Resources</i>
1995 – Masters of Science – <u>Massachusetts Institute of Technology</u>	<i>Civil & Environmental Engineering</i>
1991 – Bachelors of Science – <u>Southern University and A&M College</u>	<i>Civil Engineering</i>

PROFESSIONAL REGISTRATION

Engineer-In-Training (EIT): Louisiana (1991)

PROFESSIONAL EXPERIENCE – *BRIEF*

Southern University and A&M College <i>Associate Professor & Chair</i> – Civil & Environmental Engineering	August 2014 to Present
Southern University and A&M College <i>Adjunct Instructor</i> – Civil & Environmental Engineering	August 2013 to May 2014
The Johns Hopkins University <i>Adjunct Instructor & Developer</i> – Environmental Engineering & Science	May 2010 – December 2013
CH2M HILL <i>Senior Technologist</i>	August 2008 to 2013
Los Alamos National Laboratory <i>Technical Staff</i>	February 2002 to July 2008
US Environmental Protection Agency <i>Environmental Scientist</i>	April 1998 to January 2002
NIA Corporation <i>Director of Environmental Services</i>	August 1996 to December 1997
Oakland Electronic Commerce Resource Center <i>Instructor</i>	August 1996 to December 1997
Procter & Gamble (<u>The Folgers Coffee Company</u>) <i>Plant Environmental Manager</i>	January 1992 to August 1992

SKILLS & EXPERTISE

Administration & Management	Government & Public Policy	Leadership
Civil & Environmental Engineering	Groundwater & Hydrology	Water Resources
Natural Resource Economics	Science & Technology	Statistics
Change Management	Mentorship	Decision Analysis
Monitored Natural Attenuation	Contaminant Fate & Transport	Wastewater
Site Assessment & Remediation	Collaborative Team Member	Top-Down Analytics
Costing / Budgeting / Forecasting	Organizational Assessment	Process Improvements
Outreach / Education / Service	Turnaround / Growth	Multiple Skills Matrix
Influence / Consensus Building	Cross Functional Responsibility	Management Mandate
Business/Systems Optimization	Business / Systems Performance	Staff Training / Motivation
Corporate / Strategic Planning	Special Projects Development	Special Projects Management
Innovative Systems Applications	Multi-National Product Design	International Expertise
Quality Assurance / Control	Personnel Evaluation / Selection	All Facets M.I.S.

DISTINGUISHING EDUCATIONAL MERITS

Virginia Polytechnic Institute & State University

Graduate Student Marshal – Fall 2008 Commencement
 Future Professoriate Graduate Certificate
 Cunningham Doctoral Scholars Award
 Charles E. Via, Jr. Civil & Environmental Engineering Doctoral Scholar
 Edna Bailey Sussman Research Internship
 Richard A. Herbert Memorial Scholarship (American Water Resources Association)

Harvard University – John F. Kennedy School of Government

Harry S. Truman Scholarship

Massachusetts Institute of Technology

Ford Foundation Predoctoral Fellowship

Southern University and A&M College

Chief Student Marshal – Fall 1991 Commencement
 USA Today Academic All American
 Honors College Graduate / Honors College Scholarship
 National Merit Scholarship
 Jostens Foundation Leader Scholarship
 Kodak Scholarship
 Alpha Kappa Mu Honor Society Academic Award
 Daryl Hughes Memorial Scholarship

DISTINGUISHING PROFESSIONAL QUALIFICATIONS

Southern University and A&M College – Baton Rouge

- American Society of Civil Engineers Deep South Conference 2013 – Keynote Speaker
- Southern University Engineer’s Week Celebration – Keynote Address

Stephen F. Austin State University – Nacogdoches, Texas

- Office of Multicultural Affairs (2013) – A Celebration of Dr. Martin Luther King, Jr. – Inaugural Keynote Address
- Office of Multicultural Affairs (2013) – Conscious Speaker Series Campus Workshop

Southern Illinois University – Edwardsville

- Engineering Symposium (2012) – Lessons from MASDAR (the world’s first carbon-neutral, zero-waste, 100% renewable energy city being built from the ground up in Abu Dhabi, United Arab Emirates); Construction Communications; and Risk Assessment and Management

CH2M HILL

- CH2M HILL’s Supplier Diversity & Small Business Program’s Subcontracting Administrator’s Award – Exemplary efforts towards utilizing small and diverse businesses in the performance of the contract (*Fiscal Year 2013*)
- Employee of the Year – *CH2M HILL Baton Rouge Sanitary Sewer Overflow Program* – Awarded by the Metro Bayou Classic Committee (*November 2010*)
- Exemplary Performance / Beyond Performance Boundaries Certificate
 - Public, Client, and City Council Communications (*July 2012*)
 - Developing and Leading the Construction Communications Team (*March 2012*)
- Nominee for CEO Excellence Award for Delivery Excellence – *MASDAR Industrial Waste Codes*
- Nominee for Capitol Area Ground Water Conservation Commission (Louisiana)

Los Alamos National Laboratory

- Distinguished Performance Award – Contributions toward International Nonproliferation (2003)

United States Environmental Protection Agency

- Diversity Action Plan Award (2000)
- Bronze Medal (2000 & 1999)
- Staff Choice Award (1999)

American Water Resources Association

- National Technical Policy Committee

PROFESSIONAL INTERNSHIPS

Molten Metal Technology <i>Policy Intern</i>	June 1995 to September 1995
Louisiana Department of Environmental Quality <i>Engineering Intern</i>	May 1990 to August 1990
Oak Ridge National Laboratory <i>Environmental Intern</i>	May 1989 to August 1989
Stanford Linear Accelerator Center <i>Science Intern</i>	June 1988 to August 1988

EDUCATION – ANNOTATED

Virginia Polytechnic Institute & State University (Blacksburg, Virginia)

August 2008

Doctorate of Philosophy

Graduate Student Marshal – Fall 2008 Commencement

Department: Civil & Environmental Engineering

Major: Environmental & Water Resources Engineering

- Conducted research related to *monitored natural attenuation*, *systems engineering*, and *natural resource economics*, under the supervision of Dr. Mark Widdowson.
- Utilized the interdisciplinary framework of sound science, good public policy and pragmatic engineered solutions to
 1. Develop formulae to calculate the time of remediation for a petroleum-contaminated aquifer (specifically tracking benzene and MTBE) through a multi-stage backward step regression
 2. Develop an integrated and interactive decision tool for economic optimization of remedial alternatives through life cycle costs comparisons
 3. Analyze case studies to evaluate, assess and measure the performance of models developed, through engineering, economic, and statistical components and tools.
- Earned the Future Professoriate Graduate Certificate:
 - Including the courses *Preparing the Future Professoriate* and *Pedagogical Practices in Contemporary Contexts*
 - Preparing future faculty and academic leaders by exposure to concepts that break the mold of existing practices in higher education

The Johns Hopkins University

(Baltimore, Maryland)

May 2000

Post-Masters Advanced Certification

Graduate Student Marshal – Fall 2008 Commencement

The G.W.C. Whiting School of Engineering

Major: Environmental Engineering & Science

- Advanced Graduate Courses:

Physical & Chemical Processes for Water & Wastewater Treatment	Public Utility Economics
Economic Foundations for Public Decision Making	Radioactive Waste Management
Geographic Information Systems w/ Remote Sensing Applications	Water Resources Management
Environmental Monitoring & Sampling	

Harvard University

(Cambridge, Massachusetts)

November 1996

Masters in Public Policy

Major: Environment & Natural Resources Policy

The John F. Kennedy School of Government

Minor: Science, Technology, and Public Policy

- Completed a dual policy concentration in (1) Science & Technology and (2) Environment & Natural Resources
- Defended Policy Analysis Exercise (*Thesis Equivalent*) which was prepared for the White House Office of Science and Technology Policy:

Models of Cooperative Research and Development for Environmental Technologies—A Case Study of Public/Private Partnerships for the Advance of the Nation's Science and Technology Agenda

 - Researched how government might encourage public/private partnerships to support the research and development of environmental technologies
 - Explored the function of cooperative models of environmental research and technology development
 - Cultivated the ability to perform detailed policy analysis, writing, interpretation, and response
- Engaged with community groups and nonprofits on issues of mutual importance relating to environmental issues, urban development and economic empowerment

- Worked on project to address issues related to the environmentally-responsible destruction of and public policy concerns for U.S. military chemical weapons
- Developed an increased capacity to perform in a diverse and sometimes hostile group/team environment (*Policy & Politics*)

Massachusetts Institute of Technology

(Cambridge, Massachusetts)

February 1995

Masters of Science in Civil & Environmental Engineering*Concentration: Groundwater Hydrology**Department: Civil & Environmental Engineering (Course I)**Sub-Concentration: Contaminant Transport*

- Research Thesis:
A Hydro-GeoChemical Assessment of Groundwater Flow and Arsenic Transport in the Aberjona River Sub-Basin
- Coordinated multi-disciplinary communication and teamwork with other work groups, laboratories and divisions across the Institute
- Researched, analyzed, and synthesized data to determine the true geologic condition, hydraulic state and contaminant degree of the sub-surface environment of the Superfund research site and recommended the course for future action and data determination
- Performed numerical modeling of groundwater flow and contaminant fate and transport determination. Cooperated with, supported, and received support from citizens' groups near the Superfund research site
- Briefed community members on the progress and results of the on-site testing and analysis and also of the numerical simulation and results

Southern University and A&M College

(Baton Rouge, Louisiana)

December 1991

Bachelors of Science (*Summa Cum Laude*)*Chief Student Marshal – Fall 1991 Commencement*

Department I-A: Civil Engineering

Department I-B: Honors College

- National Science Foundation – Undergraduate Research at Southern University & University of New Orleans (*Also, Senior Honors Thesis*):
Metal Migration in Soils – An Environmental Assessment
Conducted research on metal migration in multiple soil media
- Harry S. Truman Scholarship Research:
 - Researched the environmental effects along the chemical corridor adjacent to the Mississippi River that stretches from Baton Rouge to New Orleans, termed by environmentalists as *cancer alley*
- NSF / University of California – **Summer Undergraduate Program for Engineering Research at Berkeley**
 - Conducted wastewater treatment research at UC–Berkeley and the San Francisco Wastewater Treatment Plant: *Nocardia amarae* characterization and mass:count correlation

PROFESSIONAL TEACHING, INSTRUCTION, COURSE DEVELOPMENT & ADMINISTRATION

Southern University and A&M College – Associate Professor & Chair – Department of Civil & Environmental Engineering

- **Statics** (Spring 2015) – Topics include introduction to mechanics, resultant of forces in two and three dimensions, moments and couples, equations of equilibrium, introduction to structural analysis, friction, centroid, moment of inertia
- **Hydraulics & Hydrology** (Fall 2014) – Topics include hydraulics of pipe flow and flow in pipe networks; pumps; open channel flow; weirs and spillways; hydrologic cycle, rainfall, and runoff analysis; frequency analysis, hydrograph theory, and application
- **Engineering and Construction Management** (Spring 2014) – Topics include construction and engineering management methods; introduction to engineering management principles and concepts; business management practices, communications, and teaming; project management; basic optimization; ethics and societal issues; public policy issues that impact design, construction, and operation of civil engineering facilities
- **Urban Water Resources & Systems** (Fall 2013) – Topics include qualitative and quantitative requirements for domestic, fire and industrial water use; principles of collection, pumping and storage; reservoir systems and hydropower; distribution of water for public, domestics, and industrial use; storm, sanitary, and combined sewer systems; and urban hydrology

The Johns Hopkins University

- **Environmental Management Systems** — Course Developer and Instructor Fall 2013
 - Graduate Course to provide a thorough grounding in Environmental Management Systems, which constitute the primary environmental interface between the engineering profession and private industry
 - Examine a core set of issues designed to (1) reduce the use of water, energy and non-renewable resources, (2) reduce air and water pollution caused by a firm's operations, and (3) assure compliance with environmental rules and regulations
 - Explore topics such as “greening the supply chain,” Life Cycle Analysis, Leadership in Energy & Environmental Design for buildings, Energy Star for energy management, and ISO 14000 for environmental certification
- **Water Resources Management** — Instructor (Lead in Alternate Years) Summers 2010, 2011, 2012
 - Graduate Course examines watershed approaches to maintenance of the hydrological, chemical, and biological integrity of the nation's waters
 - Water supply topics include rainfall runoff relationships, probabilistic flow analysis, multiple-objective reservoir siting and operation, and safe yield analysis
 - Water quality topics include regulatory requirements; non-point source runoff; point source discharge; water quality analysis of streams, lakes, and estuaries (including waste heat, conventional pollutants, and toxic chemicals); and in-stream biological resource requirements and assessment
 - Both the water supply and water quality discussions provide an overview of current computer simulation models.
 - Course concludes with new integrated approaches for watershed management, including Waste Load Allocation and Total Maximum Daily Loss (TMDL) analysis for pollutants entering water bodies

Virginia Polytechnic Institute & State University

- **Groundwater Resources** — Instructor Falls 2006, 2007
 - Graduate Course covers the fundamentals of groundwater hydrology, including the following:
 - Saturated and unsaturated flow through porous media
 - Flow to wells via confined and unconfined Aquifers
 - Analysis of recharge basin and field drains
 - Seepage from canals into the groundwater
 - Contaminants in groundwater

Harvard University – The John F. Kennedy School of Government

- **Statistics** — Graduate Teaching Assistant Fall 1995
 - Graduate Course in quantitative analysis and empirical methods
- **Economics** — Graduate Teaching Assistant Spring 1996
 - Graduate Course in economic analysis of public policy – public finance & welfare economics

Massachusetts Institute of Technology

- **Writing** — Teaching Assistant & Tutor Summer 1993
 - Project Interphase for incoming freshmen

Oakland Electronic Commerce Resource Center

- **Information Technologies** — Course Developer & Instructor 1996 - 1997
 - *Electronic Commerce Technologies and Applications*
 - *Internet Business Marketing*
 - *Electronic & Technical Data Interchange*
 - *Intranet Applications*
 - *Geographic Information Systems*

PROFESSIONAL PUBLICATIONS & PRESENTATIONS

- Joseph, Joshua A., Jr., Michelle Jackson, and David Guillory, “Geographic Information Systems – A Tool for Effective Stakeholder Engagement on a Billion Dollar Infrastructure Improvements Project – Baton Rouge, Louisiana.” 2014 GIS and Water Resources VIII: Data to Decisions Specialty Conference of the American Water Resources Association; Snowbird, Utah; May 12-14, 2014.
- Joseph, Joshua A., Jr., and David Guillory, “Transforming Information and Resolving Citizen Complaints by Utilizing Qualitative and Quantitative Information for Data Construction, Statistical Analysis, and Policy Implementation.” 2013 Water Environment Federation Technical Exhibition and Conference; Chicago, Illinois; October 5-9, 2013.
- Joseph, Joshua A., Jr., James Llorens, and David Guillory, “Customers and Clients, Critiques and Concerns: Toward a Paradigm for Policy Analytic Success Managing Multi-Component Strategic Implementation.” 2013 Annual Conference & Exhibition; Denver, Colorado; June 9-13, 2013.

- Joseph, Joshua A., Jr., David Guillory, and Marla Hill, “A Calling to Defense – A Mandate to Defend: Progressive Engagement as the Implementation Paradigm for Cross-Boundary, Multi-Constituent Success for Communications on a Billion Dollar Infrastructure Improvements Program.” 2013 Sustainable Water Management Conference – *American Water Works Association*; Nashville, Tennessee; April 7-10, 2013. (Poster)
- Joseph, Joshua A., Jr. and Bill Bellamy, “Integration Tools and Sustainability Implements: A Holistic Approach to Integrated Sustainability.” 2010 83rd Annual Water Environment Federation Technical Exhibition and Conference; New Orleans, Louisiana; October 2-6, 2010. (Poster)
- Joseph, Joshua A., Jr. and William Butler, “Integrated Planning: The Keystone of Capacity Development and Small Water Systems Including a Case Study of the Montgomery County Public Service Authority.” 2006 79th Annual Technical Exhibition and Conference – Water Environment Federation; Dallas, Texas; October 21-25, 2006.
- Joseph, Joshua A., Jr., “A Conceptual Framework: How Best to Supply One Family in One Home in One Community with Safe, Affordable, and Reliably-Supplied Drinking Water.” 2006 Annual Water Resources Conference – American Water Resources Association; Baltimore, Maryland; November 6-9, 2006.
- Joseph, Joshua A., Jr., “Fish versus Farmer: How the Rio Grande Silvery Minnow Highlights the Might and Fright of the Endangered Species Act.” 2005 Annual Water Resources Conference – American Water Resources Association; Seattle, Washington; November 7-10, 2005.
- Joseph, Joshua A., Jr., “A Hydro-GeoChemical Assessment of Groundwater Flow and Arsenic Transport in the Aberjona River Sub-Basin.” 1996 Conference of Ford Fellows; Irvine, California. (*Also presented at the MIT Black Graduate Student Association Lecture Series and the Parsons Laboratory Lecture.*)
- Joseph, Joshua A., Jr., “Metal Migration in Soils: An Environmental Assessment.” 1992 Louisiana Collegiate Honors College Annual Conference; New Orleans, Louisiana; March 6-7, 1992. (*Also presented at the NSF-University of New Orleans/ Southern University Research Symposium and Project Review*)

Under Development

- Joseph, Joshua A., Jr., Mark Widdowson, William Cox, Daniel Gallagher, and Kurt Stephenson, “Time of Remediation Formulation for Petroleum-Contaminated Aquifers Specifically Tracking Benzene and MTBE.”
- Joseph, Joshua A., Jr., Mark Widdowson, William Cox, Daniel Gallagher, and Kurt Stephenson, “Design and Development of an Integrated and Interactive Decision Tool for Framing a Time of Remediation Decision Analysis Component.”
- Joseph, Joshua A., Jr., Mark Widdowson, William Cox, Daniel Gallagher, and Kurt Stephenson, “Utilization of Sound Science for an Environmental Engineering, Effectual Economics, and Public Policy Agenda through a Life Cycle Model to Evaluate Time of Remediation Alternatives.”

PROFESSIONAL EXPERIENCE - *ANNOTATED*

Southern University and A&M College

Associate Professor & Chair – Civil & Environmental Engineering

August 2014 – Present

Baton Rouge

- Lead the Department of Civil and Environmental Engineering
- Provide ABET Accreditation leadership and guidance
- Teach undergraduate and graduate courses and laboratories
- Advise undergraduate and graduate students
- Supervise graduate student research and/or projects
- Recruit and retain undergraduate and graduate students
- Develop and sustain an independent and extramurally sponsored research program
- Build strong relationships with local consulting firms and government agencies
- Serve the institution and its stakeholders, the profession, and the public
- Advance the mission of Southern University and A&M College

CH2M HILL

Senior Technologist

August 2008 – August 2014

Baton Rouge / Abu Dhabi / Atlanta

SPECIAL PROJECTS

Project Manager – Industrial Waste Codes for Light Industry – MASDAR, Abu Dhabi

- Managed Reach Back effort to develop light industrial discharge codes for MASDAR – the world's first carbon-neutral, zero-waste, 100% renewable energy city built from the ground up
- Directed a multidisciplinary and regionally diverse team of engineers, scientists, and policy analysts (including senior managers and senior technical specialists) that developed codes for establishing the minimum standards for solid waste, wastewater, and air emissions
- Facilitated Final Codes Delivery Workshop – a forum for how best to achieve MASDAR visions of environmental, social, and commercial sustainability – onsite in the United Arab Emirates

Lead Technologist – Global Approach to Sustainability – Corporate

- Developed the draft *Approach to Sustainability for CH2M HILL* – the corporate sustainability document to serve as the intergenerational and interdisciplinary framework that integrates specialized fields of study, sustainability applications, and inherent sustaining components:

Total Water Management

Life Cycle Analysis

Environmental Management Systems

Risk Management

Global Climate Change

Carbon Footprint

Leadership in Energy and Environmental Design

Triple Bottom Line (TPL)

- Utilized the institutionally inveterate Six-Step Model – Comprehensive System Analysis, Evaluation, and Sustainability Decision Making – as the paradigm platform

Researcher – Petrochemical, Environmental, & Sanitation Assessment – The Oriente, Ecuador

- Conducted research, data analysis & synthesis for environmental assessment of regional contamination in The Oriente Region of Ecuador for a major petroleum client – including a sanitation review.

Subject Matter Lead – Operations & Carbon Sustainability – Southeast United States Regional Utilities

- Facilitator of Q&A Session for Business Development and Technology Seminar – *Sustainable Solutions: Carbon Footprint and Optimization of Treatment Facility Operations*
- Conducted research and information synthesis for Georgia specific initiatives relative to carbon, carbon trading, carbon neutrality, and sustainability.

BATON ROUGE • LOUISIANA – SANITARY SEWER OVERFLOW PROGRAM – \$1.6 BILLION*Manager – SSO Program Risk Management*

- Lead conception and creation of the Risk Management framework for the billion dollar BTR SSO Program
- Lead Risk Management Program with responsibility for how risk management activities that impact the successful delivery of a billion dollar, consent decree mandated, infrastructure design, construction, and rehabilitation program
- Developed roles and responsibilities for Risk Manager, framework for Risk Management Plan, and working copy of the Risk Register
- Redefined seven core areas for risk categories – Program, Delivery, Finance, Accounting, Operations, Control, and Stakeholder – strategically aligned with new organizational construct and associated program leaders (*Risk Owners*)
- Characterized risks according to impacts – costs, schedule, cost & schedule, process, quality, or perception
- Conducted quantitative assessment of risks by defining likelihood of occurrence (*Risk Probability*), effect in the event risk occurs (*Risk Severity*), and *Risk Rating* – to be utilized for prioritizing tasks and resources
- Work Shopped the risk management approach to gain consensus among program leadership with respect to major tenets of the Risk Management Plan – Risk Identification, Risk Assessment, and Risk Management
- Lead workshops among risk owners, mitigation managers, and program leadership to address risk response and mitigation, risk monitoring, and risk reporting
- Work Shopped the risk management approach to gain approval from corporate leadership / advisory board members

Manager – Construction Communications Team

- Lead Complaints Resolution Team addressing citizen inquiries, complaints, and claims relative to impending, ongoing, and/or completed sewer/infrastructure construction
- Streamlined the process to close complaints ensuring sufficient address of issue in a timely and efficacious manner
- Encouraged (highly) a new approach to communications between Public Information Officers and Construction Managers that increased PIO visibility on the main operations floor versus a more remote (e-communications) approach
- Re-focused the client-customer-constituency relationship to maximize consistent and effective Program-wide communication, response, and resolution
- Ushered in a Program emphasis on Progressive Engagement highlighting a priori solutions and rapid/robust stakeholder response
- Managed a team of interdisciplinary communications specialists who address internal-, external-, and cross-communications technical, policy, economic, social and community issues relative to more than 100 design and/or construction projects

Manager/Leader – Disadvantaged Business Enterprises Team

- Tactical engagement in workshops and fairs across the State of Louisiana to showcase CH2M HILL’s aggressive stance toward small, minority, and disadvantaged business inclusion
- Strategic engagement directly with the Mayor’s Office of Small Business and Development
- Support for Mentor-Protégé Program and its evolution toward a model for City-Parish success across engineering design, construction and land.
- Created Vision Statement – to be the local model for access to new avenues of economic development and capacity building for long-term sustainability
- Developed and implemented Mission Statement – to add value to the resident-stakeholders of the City-Parish through the development of sustainable economic infrastructure, engage across the diverse array of City-Parish business enterprises, and be inclusive of these enterprises in the programs and processes of the City-Parish and its entrepreneurs
- Managed the launch of the Diverse Business Registry marketed as the Sanitary Sewer Overflow Business Network Center – *Linking People to Opportunities*

SSO Program – Management

- Ensured accountability across program leadership team for legislative (Metropolitan Council) networking, community engagement, and constituency issues resolution
- Performed analyses, prepared documents, and produced reports for meetings and in support of actions/activities essential for effective management and maintenance of the \$1.6 billion SSO Program
 - Produced the *One-Month Look Ahead (OML)* as a critical Program document for internal and external, temporal and fiduciary communications and considerations
 - Streamlined the updating and preparation of the OML to an actual “one-month, full-month” document with decreased dependency on Project Managers, Construction Managers, and multiple individuals to populate – thus reducing errors, omissions, and inconsistencies across data platforms
 - Increased individual tasks and responsibilities to update and prepare OML and thus created a more efficient OML process and more robust data QA/QC system
 - Produced the *Metropolitan Council Informationals (MCIs)* as a critical Program document for internal and external communications and considerations for Office of the Mayor-President, Department of Public Works, and the Baton Rouge Metropolitan Council
 - Revamped the MCIs through critical work-shopping among Program-wide stakeholders
 - Assessed continuously (bi-weekly) the accuracy and effectiveness of MCIs through preparation and verification with PMs and CMs, and post-audits with Program Manager and City-Parish
 - Applied relevant and Council-requested demographics for Contractors, Consultants, and Subs to MCIs for local geographic proximities and minority and/or disadvantaged enterprise standing
 - Tracked Metropolitan Council agenda items related to the SSO Program and verified passage by Metropolitan Council
 - Created and produced the *Bare Bones* costs document as a critical Program document for internal fiduciary communications and considerations
 - Coordinated cross-functional effort for documents preparation across Program’s Design and Construction components leading to increased efficiency and efficacy relative to scheduling and temporal and fiduciary considerations
 - Participated in scheduling meeting and re-chartering directive to communicate concerns for needed data to address responsibilities and obligations to City-Parish Executive and Legislative stakeholders, as well as Operations

SSO Program – Financial Accountability

- Performed analyses, prepared documents, and produced reports for meetings and in support of actions/activities essential for fiscal and fiduciary health of SSO Program
 - Reviewed report and geographical classifications for geo-economic analysis and report on SSO Program for Finance Division within Baton Rouge Department of Public Works
 - Liaised among SSO Program, Office of the Mayor-President, and Department of Public Works through attendance at Finance & Executive Committee Meetings, networking across F&E Council representatives, and via customer, client, and stakeholder resources
 - Liaised between BTR SSO Program and Purchasing Department, to communicate directly with Purchasing Director, about scheduling conflicts and constraints, and requests for accelerated task management relative to temporal and fiscal project considerations and concerns

SSO Program – Operations

- Performed analyses, prepared documents, and produced reports for meetings and in support of actions/activities essential for effective engineering and/or technical operation of SSO Program
- Recommended workflow improvements, process management solutions, and software augmentation for greater efficiency throughout Department of Public Works – Purchasing
- Liaised among SSO Program, Office of the Mayor-President, and Department of Public Works through attendance at Capital Improvements Committee Meetings, networking across CIC Council representatives, and via customer, client, and stakeholder resources
- Conducted process, flow, and information mapping and analyses for improvements to SSO Program website
- Coordinated initiation and web formatting and placement of construction bid tabs

SSO Program – Education & Outreach

- Performed analyses, prepared documents, and produced reports for meetings and in support of actions/activities essential for reaching out to affected stakeholders and educating citizens about SSO Program
- Engaged across the Executive and Legislative Branches of Baton Rouge City-Parish Government, including the Department of Public Works and other Baton Rouge entities to promote and maintain strong civic engineering, community outreach, and public education
- Represented the SSO Program and CH2M HILL at town hall meetings and public forums in various districts across the City-Parish – providing information, status updates, and/or responding to inquiries or concerns pertaining to the progress, direction, and timelines associated with the Program, or other customer concerns
- Engaged concerned citizens living near wastewater treatment plant – concerned about odor – of the ramifications and structure of a potential buyout of adjacent residents, involving US EPA, US DOJ, LA DEQ and the City-Parish
- Developed action plans and implementation schedules to communicate with affected stakeholders while minimizing construction impacts on projects of influence to a downtown motorcycle rally and weekend, a neighborhood Christmas parade, multiple Mardi Gras parades, a six-month United States Bowling Congress Open Championships, and an international science convention
- Represented SSO Program at the Louisiana Water Environment Association's Annual Conference in lieu of Program Manager – topic: *Progress of the Baton Rouge Sanitary Sewer Overflows & Wastewater Treatment Program*
- Represented SSO Program and CH2M HILL at the various fundraising events – political & civic – including a golf tournament WON by our team

- Lead the implementation and development of the process, tools and techniques leading to multiple abstract developments and paper submissions:
 - Customers & Clients; Critiques & Concerns: *Toward a Paradigm for Policy Analytic Success Managing Multi-Component Strategic Implementation*
 - A Calling to Defense – A Mandate to Defend: *Progressive Engagement as the Implementation Paradigm for Cross-Boundary, Multi-Constituent Success for Communications on a Billion Dollar Infrastructure Improvements Program*
 - Transforming Information and Resolving Citizen Complaints by Utilizing Qualitative and Quantitative Information for Data Construction, Statistical Analysis, and Policy Implementation

MANAGEMENT CONSULTING – WATER BUSINESS GROUP

- Performed water and wastewater rates assessment in support of research, identification, and mapping of residential and commercial water and wastewater rates of cities, similar in size to Atlanta, operating under consent decree – City of Atlanta
- Collected data relative to support Program Management of the Combined Sewer Overflow Remedial Measures Plan and Clean Water Atlanta Initiative, and the Atlanta Wastewater System Improvements Program (Sanitary Sewer Overflow Remediation Project) – City of Atlanta
- Researched and analyzed data to augment staff and support bond documentation, certification, and QA/QC of specifications for new housing construction; Collected and analyzed information relating to stormwater capacity of new construction detention ponds and retention volumes – Gwinnett County Water Authority
- Performed data synthesis and statistical analyses for to support staff augmentation and data synthesis for new construction housing and development bonds and retention volumes – Gwinnett County Water Authority
- Analyzed and synthesized data for Beaver Run Pump Station Operation Cost Optimization Evaluation – modeling estimated power costs, peak power rates, and potential power costs savings – Gwinnett County Water Authority
- Created, maintained, and supported SHAREPOINT sites for Southeast Water – Georgia, Carolinas & Tennessee – to improve information sharing, technology transfer and internal communications for Operations & Client Service Managers – Water Business
- Lead effort to support the City of College Park Clean Water applications for State Revolving Fund and American Reinvestment and Recovery Act (Stimulus) funding for sanitary sewer improvements and Green Projects application for Regional Stormwater Detention Facility – City of College Park
- Participated in education and training through seminars (Georgia Environmental Facilities Authority), webcasts (United States Environmental Protection Agency), and workshops (Georgia Department of Natural Resources – Environmental Protection Division) to gain technical proficiency and subject matter expertise relative to stimulus funding processes – application, administration, implementation, and compliance – Water Business
- Collected and analyzed data in support of 2010 Strategic Master Plan data collection, analysis, synthesis and workshopping of meeting summaries, technical memorandums, and project and activity prioritization ranking tables of core team activities related to necessary water production and water reclamation plant upgrades; source water protection and regulatory agency drivers; distribution and conveyance system issues, concerns, and needed upgrades; stormwater and watershed management related programs needs and activities; solid handling concerns and necessary improvements; information technology and asset management processes; and growth and flow projections related to continuous improvement – Clayton County Water Authority
- Prepared abstract – *Sustainable Solutions for a Wastewater Plant: A Case Study of Gas to Energy*, by Srinivas Jalla and George Kaffezakis (Gwinnett County Department of Water Resources) and Jay Horton, Kristina Yanosek, and Chuck Crandall (CH2M HILL) – for Georgia Association of Water Professionals 2009 Annual Conference and Expo – Water Business
- Researched and identified definitions and limitations of categorical exclusions for Georgia Environmental Facilities Association / State Revolving Fund funding for installation of new sewer lines – City of Augusta
- Researched, synthesized, and transmitted information for consent decrees and utility infrastructure finances of comparable cities to Atlanta, Georgia for mayoral elections – City of Atlanta

- Researched, analyzed, and synthesized customer service best practices for municipal utilities in contribution to delivery of report, *Customer Service Improvement Project* – Clayton County Water Authority
- Developed a paradigm model of the prioritization and strategic framework for Phase I of the Clayton County Water Authority 2010 Master Plan, including the draft of the Master Plan task order – Clayton County Water Authority
- Assisted with end of year in-field data collection, sampling, and analysis to satisfy Forsyth County State and Federal program stream flow requirements – Forsyth County Government
- Performed a critical review and assessment of the *60% Review – Groundwater Supply Wells – Zone 4 Groundwater Treatment Plant Project* – City of Glendale, Arizona

MANAGEMENT CONSULTING – ENVIRONMENTAL SERVICES

- Conducted statistical analyses (Log Pearson Type III formulation) to determine precipitation for 5-, 10-, 20-, and 25-year return periods for advanced planning of pumping system during site rehabilitation – Retention Basin at US Air Force Base
- Lead a critical review and assessment of technical memorandum, *Visual Sampling Plan Version 5.0*, written by Alta Turner/BOS and Larry Hilscher/AUS, for project teams wishing to employ statistical design for sampling plans – Environmental Services
- Performed hydraulic and groundwater analyses and senior review to determine appropriate water levels pre- and post-construction for the U.S. Nuclear Regulatory Commission Combined Construction and Operating License Application – Nuclear Plant in the United States

MANAGEMENT CONSULTING – BUSINESS DEVELOPMENT

- Participated in education and training during the Physical Protection and Security Workshop – providing a comprehensive approach to physical security of fixed sites – a proven methodology for determining system objectives and designing integrated security systems incorporating the latest in security system technologies, including computer modeling for analyzing existing or proposed security systems – Utility Management Services
- Joined team for submission of \$45 million proposal to the Institute for Water Resources to provide nationally and internationally recognized experts in national level policy making and to provide program analysis and support services, including Homeland Security/Emergency Management and Economic and Financial Analysis – Environmental Services
- Provided technical support and workshop facilitation to the 2009 Annual Georgia Fall Conference of Black Mayors; developed the agenda and liaised across Water Business, Water Resources & Environmental Management, Transportation, and Operations Management; conducted workshop - *Water, Wastewater, Economic Development & More* – Georgia Conference of Black Mayors
- Liaised between CH2M HILL and Moody Construction executives to initiate and coordinate talks relative to strategic positioning and partnering across infrastructure, the environment, and sustainability – Moody Construction Company
- Researched, synthesized, and prepared the CH2M HILL Corporate Statement for the GAWP Building Fund Response for inclusion in Conference and membership literature – Georgia Association of Water Professionals
- Formulated strategic business approach for combining technical assistance and public policy support, to promote the CH2M HILL suite of services, tools, applications, processes, and models to help Rockdale County meet its utility and stakeholder service goals and objectives – Rockdale County

MANAGEMENT CONSULTING – RECRUITMENT, RETENTION, MENTORSHIP & DIVERSITY

- Championed diversity, encouraged human capital retention, promoted employee career development, and mentored young professionals
- Networked across staff to share knowledge and experiences to help navigate career paths within and outside of CH2M HILL and through specific disciplines – providing feedback, encouragement, support and critical insight

- Selected to attend the invitation-only *2011 Harambee Summit* at corporate headquarters to contribute to the goals and strategic aims of CH2M HILL and its business success by supporting diversity and inclusivity
- Mentored to and advocated for young professionals within the Baton Rouge and Atlanta offices, to promote personal and professional growth, responsibility, independence and career accountability
- Served as official observer to several colleagues providing feedback and counsel to encourage continued success or to suggest alternative course corrective strategies via observation and interpersonal working interactions with colleagues
- Represented CH2M HILL as Ambassador to the Distinguished Lecture Series, initiated in 2008 through multi-year funding provided by the CH2M HILL Foundation to bring renowned speakers in the areas of construction engineering and management, environmental engineering, and transportation systems engineering to Blacksburg, Virginia for engagement with the Virginia Tech Community – Brendan Owens, Vice President, LEED Technical Development, U.S. Green Building Council, presented *Mind the Gap: Integrated Design, Construction, Operations, and Maintenance of Green Buildings* – Virginia Tech
- Recruited STEM majors for CH2M HILL at the *Fall 2008 Civil and Environmental Engineering Career Fair* – Virginia Tech
- Initiated and led SSO Program Seminar: *From the Red Sea to the Red Stick – Michael Johnson & Joshua Joseph Discuss Abu Dhabi Projects* – BTR SSO Program
- Authored (lead) paper and presented poster at the Water Environment Federation Technical Exhibition & Conference 2010: *Integration Tools & Sustainability Implements – A Holistic Approach to Integrated Sustainability* – WEFTEC 2010 – Sustainability
- Engaged across multiple STEM disciplines and professional interests to represent CH2M HILL and its interdisciplinary and international lead edge technology pursuits, recruit underrepresented groups of students, and mentor aspiring STEM students and young professionals relative to striving toward and attaining career successes – National Society of Black Engineers Convention & Technical Professionals Conference 2009, 2010, 2011, & 2012
- Directed and participated in Orientation/Training of new employees to CH2M HILL and/or BTR SSO Program Partners, especially in connection with Construction Communications Team and the Baton Rouge and Louisiana political landscape

MANAGEMENT CONSULTING – UNIVERSITY & EDUCATIONAL EXTENSION

- Led the effort to recruit and schedule volunteer tutors from CH2M HILL and partner organizations working on the BTR SSO Program - *@JAAG Initiative (Academic Tutors for Jaguar Athletic/ Academic Growth)* – providing academic support to football players at Southern University
- Tutored college football players at Southern University in STEM courses
- Taught Water Resources Management (Summer 2010, 2011, 2012) at The Johns Hopkins University (Whiting School of Engineering), Baltimore, Maryland, and served as Lead Instructor for graduate-level course, incorporating lessons from the academy, lab and field for pragmatic applications across the whole of water resources
- Selected to design new graduate-level course *Environmental Management Systems* and teach it – JHU Whiting School of Engineering – during the 2013 academic calendar
- Attended the *Park Forest Middle School Career Day* to represent CH2M HILL and STEM career pathways while engaging young future professionals on the BTR SSO work that is critical to their quality of life and to encourage their potential to be the best and then still be better
- Attended *Capitol Middle School Science Family Night* during Engineers' Week as one of several CH2M HILL panel participants to represent the BTR SSO Program and engage young future professionals and their families on the SSO work that is critical to their quality of life and to encourage their potential to be the best and then still be better

MANAGEMENT CONSULTING – PROFESSIONAL DEVELOPMENT

- Organized and delivered a BTR office-wide seminar and workshop on the *Lessons from Harambee* to expose BTR SSO Program staff, including City-Parish and program partners to value added highlights focused on enterprise advance, career development, and interpersonal growth

- Increased the network of influence across and beyond CH2M HILL for added value and strength to the Program, the Region, and across the Enterprise
- Led the exploration of the initiative to study the potential for a Center of Excellence for the City-Parish of Baton Rouge for water/wastewater operations, in response to an Executive Branch directive to focus geographically and economically on an area of the City-Parish in need of development opportunities
- Researched national Centers of Excellence across functionalities and highlighted two highly successful Centers as potential models for Baton Rouge
- Organized a multi-Center, multi-city, multi-university tour and fact-finding expedition with the SSO Program Manager to understand the historical impetus for establishing the centers and to explore the technical, managerial, and financial capabilities and constraints of such centers
- Prepared findings for internal committee to assess and process critical feedback for synthesis to the City-Parish
- Consolidated input for a summary of findings and recommendations for City-Parish with the potential to lead to a higher profile and increased role for assisting with the coordination of a legislative strategy with the State of Louisiana to address training and center identification, exploration of technical and technology gaps across best practices for operators and current operator training, cultivation of a relationship with Southern University and its Department of Civil Engineering to partner in establishing a center in north Baton Rouge, insurance of access to a full-scale wastewater treatment facility – on or close to site, modeling of an initial and sustaining funding stream, and execution of a mayoral site visit
- Consulted with cross-business colleagues about an RFQ (Environmental Services) for the Port of New Orleans and applied diverse background and array of skills to allow for filling several expertise gaps in the proposal relative to environmental engineering, management planning, contracts, expert testimony and municipal needs
- Partnered with Alcatel-Lucent and The Bayard Research Group to tutor football players at Southern University in association with the internal CH2M HILL @JAAG Initiative (*Academic Tutors for Jaguar Athletic/Academic Growth*)
- Attended the National Society of Black Engineers Annual Conference – 2009, 2010, 2011, & 2012 – for professional development and interpersonal skills enhancement
- Represented technical and technology advance on behalf of CH2M HILL at NSBE Conference via delegated participation in the Science & Policy Working Group and the Energy & Environment Working Group
- Provided enhanced career potential mentorship and advocacy for budding engineering undergraduate and graduate students, graduates, and professionals at NSBE Career Fair and career development workshops

United States Environmental Protection Agency

April 1998 – January 2002

Environmental Scientist

Washington, District of Columbia

Office of Groundwater & Drinking Water

Office of Research & Development

INFRASTRUCTURE & GAP ANALYSIS

- Served as Ground Water and Drinking Water's Lead Staff Person focused on Infrastructure needs and gap analysis to analyze emerging concerns about the capacity of water systems to meet expanding public health and financial demands:
 - Leading the effort to collect and synthesize data on Infrastructure needs and gap analysis
 - Reviewing and commenting on technical and financial information from sources outside of the Agency relevant to Infrastructure
 - Managing efforts to analyze and address emerging concerns about the capacity of water systems to meet expanding public health and financial demands
 - Leading contract efforts that support Infrastructure program, policy, and agenda advancement
 - Leading and managing effort to establish an Infrastructure Working Group to the National Drinking Water Advisory Council

- Served as an Environmental Scientist within Ground Water and Drinking Water helping to develop and support office-wide programs and the office policy agenda on infrastructure gap and other topics through the review, research, analysis, and/or preparation of environmental science, engineering, technology, or policy concepts, initiatives, and/or proposals:
 - Supporting efforts to advance the policy agenda of OGWDW by representing the concerns affecting and affected by Infrastructure or other appropriate program areas
 - Attending meetings, (such as Stakeholder meetings, national workshops and conferences, inter-governmental strategy meetings) to represent the Office or Agency as necessary to gain information from or provide information to relevant parties
 - Coordinating with Office of Water, especially the Office of Wastewater Management
- Provided technical and resource support to stakeholders, federal organizations, regions, and states to support Infrastructure initiatives and advancements:
 - Transmitting information to and from Office and Agency from and to all necessary entities vested in efforts to promote, shape, and influence issues pertaining to Infrastructure or other Office programs under my purview
 - Maintaining open channels of communication with all relevant parties to ensure awareness of Infrastructure issues, concerns, and progress
 - Managing efforts to shape and cultivate positive and productive communication, relationships, and partnerships with national Stakeholders relative to Infrastructure or other issues within the Office and Agency

ENVIRONMENTAL SCIENTIST – DRINKING WATER UTILITIES

- Provided technical assistance to and from the Small Systems Team to support work-plans, paradigm analysis and development, and/or other documents or projects that contribute to the overall health and productivity of the Small Systems Team and/or other teams/efforts within Implementation and Assistance Division, Ground Water and Drinking Water, Office of Water, and the Agency:
 - Participated in the development of the Strategic SDWA Compliance Planning for Small Systems Workshops
 - Served on the Steering Committee for the Second Small Water and Waste Water Systems Symposium co-sponsored by NSF, International and the Rural Water Research and Education Foundation
 - Served as a Steering Committee member for the Third NSF International Symposium and Technology Expo on Small Drinking Water and Wastewater Systems
 - Participated in the National Capacity Development Coordinators Meeting
 - Participated and presented information at the National Technology Assistance Program Coordinators' Meeting
 - Served as Project Officer for 4 technology assistance centers—California State University–Sacramento, Charles County Community College, Pennsylvania State University, and University of Illinois at Urbana-Champaign
 - Participated in or conducted meetings with technology assistance center directors—California State and Charles County
 - Attended the pre-briefing for the Water Systems Council and helped to facilitate the grant-awarding process
 - Participated in meetings of the National Drinking Water Advisory Council's Small Systems Working Group and also conference calls
 - Served as Project Officer for grant to Virginia Polytechnic Institute and State University—Research, Development, and a Feasibility Study of Telemetry/Remote Control for Small Water Systems in a Geographic Information Systems Environment
- Served as an Environmental Scientist within IAD with responsibility for the development, preparation, review, analysis, or other support of proposed, new, or revised regulations and guidance of relevance to Small Systems, the Division, the Office or Agency:
 - Coordinated and directed IAD's facilitation role in the co-development of the unreasonable risk to health (URTH) and protective of public health (POPH) guidance along with OST
 - Attended RIB meeting on rules implementation on behalf of Small Systems
 - Attended arsenic affordability meeting and briefing in support of Arsenic rule development

- Participated in the trial-run / review of the Strategic SDWA Compliance Planning for Small Systems Workshops
- Worked on the development and evaluation of the “capacity assessment” tool
- Prepared AMWA speech for C. Dougherty—An Update of Planned Drinking Water Regulations
- Prepared ASDWA speech for C. Dougherty—Ground Water and Drinking Water Program Update
- Prepared GWPC talking notes for C. Dougherty on the Ground Water Rule
- Helped in the preparation of ASDWA speech for C. Fox
- Participated in GAO/DWPD meeting pertaining to the Drinking Water Funding Study
- Attended the Council of Infrastructure Financing Authorities National Workshop and the State/EPA SRF Work Group Meeting
- Attended the Theodore M. and Kay W. Schad Lecture in Environmental Management: 2000 Symposium—Policy Initiatives for Improving US Water Management in the Next Administration
- Attended the Agency-sponsored Clear and Simple Writing Class
- Provided technical and resource support to Regions relative to small systems and capacity development issues:
 - Participated in bi-weekly conference calls with Regions relative to small systems and capacity development issues
 - Attended and participated in four Strategy Workshops held in Regions I, III, VII, and IX
 - Attended the National Branch Chief’s Meetings in Bethesda, Maryland and Kansas City, Missouri
 - Provided specific follow-up information to Region III on URTH in response to questions from the State of Virginia
- Provided technical and resource support to Stakeholders to support small systems and capacity development efforts:
 - Attended and conducted workshops at the state meeting of the Idaho Rural Water Association—Boise
 - Attended and conducted workshops at the National In-Service Training of the National Rural Water Association—San Antonio, Texas
 - Attended and co-chaired workshops at the Second NSF International Symposium and Technology Expo on Small Drinking Water and Wastewater Systems—Phoenix, Arizona
 - Attended the National Conference of the National Society of Black Engineers and represented the Agency on the Environmental Justice Special-Interest-Group Roundtable

SPECIAL PROJECTS

Environmental Engineer/ Scientist Standing Register Workgroup

Participated in the Environmental Engineer / Environmental Scientist Standing Register Workgroup as the Subject Matter Expert representing the Office of Water and the Office of Ground Water and Drinking Water. The workgroup was tasked with developing qualifications criteria that would be used to establish two new standing registers for Environmental Engineers and Environmental Scientists.

Diversity Action Plan Workgroup

Served as the OGWDW representative to the Office of Water Diversity Action Plan Workgroup. The group, at the request of the Office of Water Administrator was tasked with helping to modify the Plan submitted to the US EPA Administrator (June 1997) to reflect the progress made and to identify the actions to be recommended for next year.

Project Officer for several Technology Assistance Centers/ University Grants

Directed grants management of five (5) nationally competed Small Public Water Systems Technology Assistance Centers (University of Alaska, Sitka – Southeast Campus; University of Illinois, Urbana–Champagne; Pennsylvania State University; California State University, Sacramento; and Charles County Community College, Maryland). Additional project management responsibilities included coordination of the grant application process with newly Congressionally-named TAC at the University of New Hampshire.

Served as project officer for Virginia Polytechnic Institute and State University for work on telemetry/remote control for small water systems in a GIS environment.

Futures Forum – “Unserved” Populations

Served as the EPA lead on the “Unserved Populations” question for the Futures Forum and was active facilitating, coordinating, and participating in discussions with key partner/sponsor organizations – Association of State Drinking Water Administrators, Rural Community Assistance Program, and other affiliates, such as the USDA Rural Utility Service. The purpose of the Drinking Water Futures Forum was to evaluate the challenges facing the nation in ensuring a safe supply of drinking water in 25 years, and develop a plan to meet those challenges.

Employee Services Team

Served as a member of the OGWDW Employee Services Team and led the effort to develop the “BUDDY” Program for presentation to the HR Council. The “BUDDY” program served as an additional resource and support option for new employees within OGWDW to help facilitate a smoother transition to a professional work environment, an environmental and regulatory workplace, and/or the federal government.

Liaison with National Sanitation Foundation International

Served as the Small Systems Team technical and technology reviewer for documents, protocols, and recommendations to the EPA/National Sanitation Foundation – Environmental Technology Verification – Pilot Steering Committee for Package Drinking Water Treatment Systems. The goal was to establish the quality and veracity of data by developing verification protocols and test plans, independently testing and validating package equipment, conveying and supporting government/industry partnerships, and preparing product verification reports for broad dissemination.

Served on the Steering Committee for the Small Water and Waste Water Systems Symposium (National Sanitation Foundation /Rural Water Research & Education Foundation) held January, 2000.

American Water Works Association – 1999 Annual Conference

Developed and co-authored paper entitled, *Small Systems – Planning for Success*, co-authored with the Small Systems Team Manager.

Public and Community Service

Represented EPA at the Public Service Recognition Week display on the national mall.

Participated in the Anacostia River Celebration event for elementary through high school students by conducting the “Aquifer-in-a-Cup” demonstration.

Division Lead on Arsenic

Served as the Implementation & Assistance Division lead for Arsenic.

URTH / POPH Guidance

Co-lead for OGWDW for facilitating – along with the Office of Science and Technology – development of guidance for States on determination of “unreasonable risk to health” and “protective of public health” under the variance and exemption rule, along with OST.

Los Alamos National Laboratory

February 2002 – July 2008

Technical Staff Member

Los Alamos, New Mexico

Nonproliferation and International Security Division – Safeguards Systems Group

- Worked on multiple issues within the Threat Reduction Directorate – nuclear materials control and accountability, domestic safeguards, and international protection and controls
- Received and worked under a Top Secret – National Security Q Clearance
- Awarded the Distinguished Performance Award in 2003

NIA Corporation

August 1996 – December 1997

Director of Environmental Services

Oakland, California

Initiated, marketed, and directed the Environmental Division of NIA to comprehensively address the environmental needs of business, government, individual and community entities

Oakland Electronic Commerce Resource Center

August 1996 – December 1997

*Instructor**Oakland, California*

Designed and delivered multi-media training material and seminars for businesses wishing to utilize electronic commerce technologies, including the Internet, intranets, Geographic Information Systems, and Electronic and Technical Data Interchange

Molten Metal Technology

June 1995 – September 1995

*Summer Intern – Government Affairs**Waltham, Massachusetts*

- Developed customer database for commercial radioactive waste; conducted research and provided assistance in supporting project delivery for the ion exchange resin plant in Oak Ridge, Tennessee
- Conducted research and provided assistance in supporting project delivery for the M4 Combo plant in Oak Ridge, Tennessee
- Researched the engineering and science graduate programs at Historically Black Colleges and Universities for a potential partner institution with Los Alamos National Laboratory
- Recommended an accepted social science methodology to measure and project MMT's complete economic impact on Oak Ridge, Tennessee and Fall River, Massachusetts

Procter & Gamble

January 1992 – August 1992

*Plant Environmental Manager – The Folgers Coffee Company**New Orleans, Louisiana*

- Designed, implemented, and managed the Plant Environmental Program for the facility to maintain full compliance with EPA, Louisiana DEQ, and the New Orleans Sewerage and Water Board regulations
- Designed, published and produced *n-View (Vogue)* – the Folgers Coffee *newsletter for volunteers interested in enriching the world.*

Louisiana Department of Environmental Quality

May 1990 – August 1990

*Summer Engineering Technician**Baton Rouge, Louisiana*

Hazardous Waste Division – Office of Permits

- Evaluated the integrity of industrial structures and permits
- Conducted facility assessments
- Assessed product quality for hazardous waste applications by experimentation, observation and analysis

Oak Ridge National Laboratory

May 1989 – August 1989

*Summer Engineering Trainee**Oak Ridge, Tennessee*

Health, Safety, Environment and Accountability Division – Environmental Monitoring Group

- Decontaminated test and field equipment
- Performed QA verification of hazardous sample data
- Collected hazardous and non-hazardous multi-media samples for environmental analysis and site assessment

Stanford Linear Accelerator Center

June 1988 – August 1988

*Summer Science Intern – Survey & Alignment Division**Palo Alto, California*

Designed a method and computer program for checking the alignment of the two-mile linear accelerator using the HP-71, and a variety of computers, surveying equipment, and drafting tools

PROFESSIONAL DEVELOPMENT

Southern University

- ABET Accreditation Assessment Workshop

CH2M HILL

- Physical Protection Systems Training Course
- Georgia Environmental Facilities Authority – State Revolving Fund Training (SRF – 101)
- Business Development / Project Delivery Tutorial
- Project Delivery Training
 - Understanding the CH2M HILL Project Delivery Process
 - Career Development Framework Overview
 - Management and Leadership Skills
 - Building Client Relationships
 - Team Chartering
 - Work Planning
 - Understanding Cost and Other Key Terms
 - Revenue and Margin
 - Baselineing and Project Setup
 - Project Monitoring and Control
 - Managing Change
 - Endorsement
 - Project Closeout
- Workplace Harassment Training Program
- Health, Safety, Security and Environment Training
 - Hazard Communication
 - Lifting
 - Ergonomics Awareness
- Security/Asset Protection Awareness Training
- Timekeeping Training
- Benefits Orientation
- Expense Report Training

Los Alamos National Laboratory

- Introduction to Nuclear Materials Control & Accountability (MCA – 101D)
- Materials Accounting for Nuclear Safeguards (MCA – 111)
- Export Control Fundamentals
- Security Refresher Training
- Enterprise Information Applications Access & Security Awareness Briefing

- Computer Security Briefing
- General Employee Training

NIA Corporation – Oakland ECRC

- Internets – Intranets – Electronic & Technical Data Interchange
- Geographic Information Systems

Oak Ridge National Laboratory

- Hazardous Waste Operations Training – *Diversified Scientific Services, Inc.*
- Geographic Information Systems

Procter & Gamble

- Visible Emissions Evaluation Training (Smoke School) – *Eastern Technical Associates*
- P&G College – Corporate Orientation, Training, Business Development, and Marketing
- Environmental Regulation Course – *Executive Enterprises, Inc.*

ORGANIZATIONS, SOCIETIES, & AFFILIATIONS

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| <ul style="list-style-type: none"> - American Water Resources Association <ul style="list-style-type: none"> Virginia Tech Chapter President – 2006 Virginia Tech Chapter Vice President – 2005 - National Society of Black Engineers <ul style="list-style-type: none"> National Panelist – Environmental Justice Roundtable - Omega Psi Phi Fraternity, Inc. <ul style="list-style-type: none"> National Scholar Ronald McNair Ninth District Scholar National Undergraduate Man of the Year - Massachusetts Institute of Technology <ul style="list-style-type: none"> Certificate of Honor for Outstanding Service – The Graduate School Graduate Student Council – Organizer & Co-Chair – The MIT Fair Black Graduate Student Association – Executive Committee - SYNTHESIS (NSF) <ul style="list-style-type: none"> Student Advisory Committee Site Visit & Project Review Delegate - Evaluator – Innovations in American Government Award (Ford Foundation; Harvard Kennedy School of Government) | <ul style="list-style-type: none"> - Chi Epsilon Civil Engineering Honor Society - Sigma Xi Scientific Research Society - American Society of Civil Engineers <ul style="list-style-type: none"> Louisiana Outstanding ASCE Student of the Year - American Geophysical Union - Southern University Collegiate 4-H Club <ul style="list-style-type: none"> Charter Member - Pi Mu Epsilon Mathematics Fraternity - United States Achievement Academy - National Groundwater Association |
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HONORS, AWARDS, & RECOGNITION

- Senior Scholar – VT Emerging Leaders Workshop
- Judge – VT Undergraduate Research in Engineering CEE Poster Contest
- Judge – 22nd Annual VT Research Symposium and Exposition
- Southern University Speaker – Louisiana Board of Regents Master Plan Hearing
- National Dean’s List
- Southern University, Baton Rouge – Chancellor Search Committee
- National Rural Electric Association’s Youth Consulting Board
 - Louisiana State Representative
 - Vice President (1987-1988)

SPECIALIZED COMPUTER SKILLS

Numerical Modeling	FORTRAN
<i>Natural Attenuation Software</i>	Microsoft Suite
Geographic Information Systems	Standard Commercial & Engineering Software

FOREIGN LANGUAGE

French – *Moderate*