

Objective / Key Skills

Seeking a multi-disciplinary, high-impact role that leverages a diverse set of experience and knowledge in analytical methods, emerging technologies, program management, and organizational strategy.

Business & Systems Analysis
Communication & Collaboration
Content & Knowledge Management
Data Analysis, Engineering, & Mining
Data & Geospatial Visualization
Decision Support & Expert Systems
Emerging Technologies

Innovation & Creative Problem Solving
Marketing & Branding
Market & Competitor Research
Metric & Algorithm Development
New Business Development
Operations Research & Analysis
Process Modeling & Improvement

Product Development & Management
Social Media & Networking
Strategic Planning & Consulting
Systems & Data Integration
Technical Assessment & Deployment
Testing, Training, & Documentation
User Experience & Interface Design

Professional Experience

TechOp Solutions International

2010 - Present

Provides technology and operational solutions for improved situational awareness, critical information sharing, and best-informed decision making to senior government leaders in homeland security and defense enterprises.

Associate Director, National Security Programs (Feb 2010 – Present)

Transformation Architect, Department of Defense (DoD), Under Secretary of Defense for Intelligence (USD(I)), Multi-Agency Collaboration Environment (MACE) (Feb 2010 – Present)

- Provide management, strategic, technology, and analytic consulting support to the MACE and its partners in order to develop and sustain trusted information sharing partnerships within and across organizational boundaries. Partners consist of 100+ organizations across government, industry, and academia in domains to include, but not limited to: homeland defense, critical infrastructure protection, biosurveillance, incident management, telecommunications, counter-WMD, counternarcotics, strategic communication & information operations, and law enforcement.
- Support MACE leadership in performing core organizational functions such as program development, strategic planning, change management, and performance measurement in order to expand portfolio of stakeholder engagements and innovative information technology solutions
- Serve as project manager for several MACE engagements, with responsibilities that include: (a) development and maintenance of project documentation such as the project plan, risk mitigation plan, and technology transition plan; (b) collaboration with engineering staff to develop and deliver system architecture blueprints and pilot system capabilities; and (c) coordination with network security, information assurance, general counsel, and federal contracting stakeholders to ensure documentation of and compliance with all security, legal, and financial requirements
- Serve as product manager for the MACE User Defined Operations Picture (UDOP), a robust enterprise application that allows for integration of disparate data sources into a flexible front-end capability to facilitate better search and discovery, visual analytics (geospatial, temporal, categorical, link/network, and quantitative analyses) and reporting and collaborative functions
- Serve as knowledge manager and developer for the MACE internal SharePoint portal, supporting 100+ users across 15+ unique project coordination and capability demonstration sites with collaborative wikis, custom web parts and lists, etc.
- Designed enterprise technical architecture utilizing over \$6 million in license acquisitions to achieve comprehensive yet efficient information sharing practices through cross agency federated search, enhanced information retrieval, integrated search, analysis, visualization, collaboration, reporting, and management capabilities
- Provided immediate visual analytics, technology assessment and evaluation, and decision support capability to Office of Management and Budget (OMB) Chief Enterprise Architect, Federal Information Sharing Environment (ISE), DHS Office of Health Affairs (OHA), and USCG National Incident Command (NIC) during Deepwater Horizon oil spill response effort
- Key contributor to MACE engagement with the DoD Joint Staff Anti-Terrorism / Force Protection (AT/FP) and Defense Critical Infrastructure Protection (DCIP) replacement of the Core Vulnerability Assessment Management Program (CVAMP) system

Intercept Analytics Group, LLC

2009 - Present

Part-time consulting venture provides affordable data mining, statistical analysis, and strategic advisory solutions to government and commercial clients in and around Washington, DC.

Founding Partner (Jul 2009 – Present)

- Leading new business development, brand marketing, technical, operational, and strategic initiatives
- Contracted with marketing department of large DC lobbying firm to re-build their data collection, information management, and analytical practices for data on 200,000+ donors representing over \$100M in annual giving
- Provided comprehensive quantitative analyses of new and existing donor data to help maximize annual giving, accomplished through determination of high-probability ask amounts and the development of insightful, data-driven campaigns to test competing marketing initiatives

Veratect Corporation

2008 - 2009

With a state-of-the-art analytical methodology and innovative technical platforms, Veratect provides the earliest detection of emerging biological disease and civil unrest threats around the globe for corporations, governments, and global citizens.

Director of Computational Analytics (Jul 2009 – Dec 2009)

- Led all advanced analytics, operations research, methodological, risk quantification, and new product initiatives
- Analyzed data on 100,000+ disease and civil unrest risk events, each with 200+ unique data elements, to provide better understanding of existing and emerging threats, including the Influenza A (H1N1) outbreak in April 2009
- Supported strategic business decisions with the development of new management and efficiency measures and innovative performance dashboards for 30+ person operations team using all associated tactical report data
- Contributed several independent and team research reports for dissemination to 8,000+ person partnership network

Product Manager (Jul 2008 – Jul 2009)

- Led all product management, user experience, advanced analytics, and methodological development teams in addition to serving as the primary liaison between operations, IT, marketing, sales, and client relations staff
- Managed the primary enterprise product line of 3 integrated information delivery platforms accessed by 200+ organizations to include 80+ Fortune 500 companies, US and foreign governments, and global public health agencies
- Led development, deployment, training, and analysis of technical systems including the core internal reporting platform, internal SharePoint knowledge management and collaboration environment, social media and networking tools, client-facing RSS/HTML/XML/KML/Atom data feeds, and customizable email alert capabilities
- Contributed to new business development and customer engagement initiatives through several international meetings and conferences within the insurance, manufacturing, and defense industries, among others

Data Integration Engineer (Apr 2008 – Jul 2008)

- As a founding member of the company, led all collection and sourcing, knowledge management, product development, competitor analysis, and market research efforts to include integrated strategic plans and executive reports
- Developed internal knowledge management portal for networking and collaboration amongst 50+ individual users and 8 teams, including an internal wiki environment that grew to contain over 5,000 pages in 6 months
- Developed and implemented core risk quantification algorithm comprised of 100+ unique variables covering events on 230+ disease entities as identified through open-source media analysis in 35+ different languages
- Contributed to major purchasing, investment, and technical partnership decisions worth over \$500,000 in first year

Project Argus, Division of Integrated Biodefense, ISIS Center, Georgetown University Medical Center 2006 - 2008

Federally-sponsored biosurveillance program provides tactical and strategic analysis of disease risk events, as identified through open-source media and other data sources, to major public health officials and agencies in the US and abroad.

Technical Integration Analyst, Strategic Analytics Unit (Mar 2007 – Apr 2008)

- Project lead and developer for internal knowledge management portal, collaborative geospatial platforms, and various visualization, link analysis, and ontology management applications for use by 50+ individuals across 5 teams
- Administered advanced Bayesian modeling and text analysis system for efficient, real-time information retrieval and relevancy-ranking of articles from 10,000+ unique sources in 35+ languages
- Assessed competing technologies in text analytics, link analysis, taxonomy management, and enterprise data sharing/visualization platform to improve operational efficiency, fill system gaps, and enhance knowledge creation
- Created and distributed novel products, comprehensive analytical reports, and stat sheets for federal government sponsors and associated community of 250+ users

Programmer / Analyst (Aug 2006 – Mar 2007)

- Developed and maintained 10,000+ Perl scripts for real-time ingestion of complex, multilingual, open-source media
- Trained and managed sourcing and collection team of 12 individuals
- Designed and implemented enterprise data structuring protocols through analysis of tactical reporting environment

Educational Background

Georgetown University (Washington, DC): Master of Science in Mathematics and Statistics 2008

- Courses: Multivariable Calculus, Mathematical Statistics, Probability Theory, Data Mining, Numerical Methods of Analysis, Signals Processing, Deterministic Models, Categorical Data Analysis, Technology & Intelligence, Statistical Consulting Practicum, Combinatorics & Combinatorial Optimization

Wake Forest University (Winston-Salem, NC): Bachelor of Arts in Physics, Minor in Mathematics 2006

Avon Old Farms School (Avon, CT) 2002

Societies & Philanthropies

- American Statistical Association
- AnalyticBridge
- Consortium for the Advancement of Undergraduate Statistics Education
- Greater Good Science Center
- Institute of Mathematical Statistics
- National Geographic Society
- National Lab Day Volunteer
- Shaping Tomorrow Foresight Network
- Sigma Pi Sigma Physics Honors Society
- Statistics in Defense & National Security
- Statistics Without Borders
- STEM Education Coalition
- TED (Tech, Entertainment, Design)
- The Reading Connection
- Virginia Academy of Science
- Washington Statistical Society
- World Vision International

Certifications

- FEMA IS-00100 Introduction to Incident Command System (Completed Sep 2007)