

# Erik Shepard

218-A East Eau Gallie Boulevard, #141 | Indian Harbour Beach, FL 32937 | 321-848-3398 | [erik@waterbridge.biz](mailto:erik@waterbridge.biz)

## PROFILE

- Solution focused, innovative leader with experience in strategic planning, business analysis and justification, project and program management
- 20+ years of experience leading projects with geospatial technologies including GIS, GPS/GNSS, remote sensing and photogrammetry with an emphasis in engineering informatics, data quality and data maintenance processes, data warehouse and data-centric solutions, and real-time ambient data acquisition via sensor platforms
- Significant experience focused on leading projects for intelligent utility and Smart Grid initiatives to integrate technologies including GIS, GWD, DP, EAM, WMS/MWM, OMS, DMS, AMR/AMI, SCADA and DA/SA, as well as domain experience in transportation, natural resources, planning and location based services
- Thought leader and published author and conference speaker with more than 25 articles and/or presentations including two quarterly columns in industry publications focused on dynamic data characteristics and challenges and on sensor platforms and applications respectively
- Member, IEEE (Geoscience & Remote Sensing Society, Signal Processing Society, Power & Energy Society)

## RECENT EMPLOYMENT HISTORY

**Principal**, Waterbridge Consulting

2009 – Present

- Independent consultant/contractor focused on enabling intelligent utility projects, with services including strategic planning, business case development, business analysis, solution implementation and project/program management
- Currently contracted to Hydro One to support the Advanced Distribution System (ADS) project, which is focused on enabling integration of distributed generation and renewables and improving efficiency, reliability and planning through implementation of a DMS with DA and SA
  - Leading team focused on developing data maintenance processes, turnaround time service levels, and exception management tools as well as transition and resource plans for sustainment of data for the DMS, from sources including the network model, protection and controls settings, SCADA and ICCC gateway configurations, and customer load profiles
  - Leading team to acquire and consolidate source data, systems and processes to develop the electrical network model from field collected assets, designs, operations/outage data, smart meters and substation schematics after developing business case with 5-year payback and regulatory filings for capital funding; realized > 250% of planned benefits for first year of benefits tracking
  - Providing subject matter expertise to support ongoing initiatives including AMI, EAM, Mobile Platform and BI
  - Audited existing field data scrubbing methods to yield a 60% reduction in costs while realizing a 300% increase in productivity
  - Contribute to RFP development, vendor selection and scope of work development for software and systems integration vendors
- Provided consulting to SSP Innovations to support utility systems projects including GIS, graphic work design, outage management, distribution planning, and mobile dispatch for clients including SHECO, GP&L and MLGW
- Provided subject matter expertise on utility systems integration to EPIC Engineering & Consulting Group to secure NSF ITR Small Business grant

**Senior Consultant**, Enspira Solutions (now part of Black & Veatch)

2006 – 2009

- Provided strategic planning, business case development, project planning and business process consulting to support engagements with technologies including GIS, OMS, EAM and AMI to utility clients including Hydro One, United Illuminating, Con Edison, Georgia Power, BG&E, PEPCO and various municipal utilities as well as to government and transportation clients including the Port of Portland and Jeppesen
- Contributed to strategic direction to expand the AMI practice into Smart Grid and led the incorporation of societal and environmental benefits through valuation of green programs and carbon reduction in the societal cost test to strengthen the AMI/Smart Grid business case

**Senior Project Manager**, Telvent Miner & Miner

2002 – 2006

- Provided project management and technical consulting for ArcFM Solution software implementation and integration projects with technologies including GIS, OMS, WMS, design and distribution planning to more than fifteen energy, water and telecommunications utility clients including Hydro One, Georgia Power, Dominion, Santee Cooper, Laclede Gas, AGL, OG&E and various municipal utilities

**Program Coordinator - Faculty**, University of Georgia, Information Technology Outreach Services

2000 – 2002

- Established and led a self-sustaining practice focused on web-based data warehousing/analytics solutions with clients including Georgia Power, Georgia Utilities Protection, the Georgia Departments of Transportation, Education, Health, Natural Resources, and Revenue, and the USGS

## EDUCATION AND CREDENTIALS

**Doctor of Philosophy**, Geography, University of Georgia

**Master of Science**, Geography, University of Georgia

**Bachelor of Science**, Mathematics, University of Georgia

**Certified MultiSpeak Integrator**

**Certificate**, Digital Signal Processing, University of California San Diego (in progress)

**Certificate**, Geographic Information Science, University of Georgia

## ARTICLES AND PRESENTATIONS

Where It's About Time: Dynamic Decision Points, *GeoWorld*, May 2012 Column

Vast Sensors, Big Data: Big Opportunities, *V1 Magazine*, March 2012

Where It's About Time: Asset Management Requires a Solid 'State' of Mind, *GeoWorld*, February 2012 Column

New Horizons: Sensors Add Dynamic Content to the Information Ecosystem, *GeoWorld*, December 2011

Where It's About Time: Let's Talk Sensors, *GeoWorld*, November 2011 Column

Integrating Engineering, Economics and Environment: Geospatial Tools Enable the Smart Grid, *Autovation* 2011

Where It's About Time: It's Not a Party, It's an Event, *GeoWorld*, August 2011 Column

Hydro One: Location is Imperative, (Co-author Nargis Ladha), *Intelligent Utility*, July/August 2011

Beyond Maps and Maintenance Records: Leverage Geotechnology for Integrated Decision Support, *GeoWorld*, June 2011

Where It's About Time: Make the Business Case for Temporal GIS, *GeoWorld*, May 2011 Column

Where It's About Time: How is Time Best Represented in a GIS?, *GeoWorld*, February 2011 Column

Where It's About Time: Geography and Time are Intertwined, *GeoWorld*, November 2010 Column

A Utility for Utilities: Apply GIS for Spatially Enabled Benefits Elaboration and Realization, *GeoWorld*, March 2010

Societal, Environmental Benefits in the Smart Meter and Smart Grid Business Case, *PowerGrid International*, December 2009

Rolling Out Technology to Field Workers, *PowerGrid International*, November 2009

Getting Your GIS 'Smart Grid Ready', (Co-author Nargis Ladha), *ESRI Electric and Gas User Group* 2009

The Evolution of Geospatial Technology: From Enabling Technology to Critical Foundation for the Smart Grid, *Utility Automation and Engineering T&D*, December 2008

Smart Maps: Improving Map Access for the Field Workforce, *GeoWorld*, October 2008

Balancing Environmental Mandates and Fiscal Responsibilities with Geospatial Technology, *ESRI Electric and Gas User Group* 2008

Data Refresh: Breathing New Life into a GIS Database, (Co-author Ruth Craven), *Electric Energy T&D Magazine*, March/April 2008

A Visual Platform: GIS Can Integrate Utility Business Data, *GeoWorld*, March 2008

Intelligent Geospatial Information Systems as a Platform for Enterprise Integration, *GITA* 2008

Enterprise GIS Performs for the Integrated Cable Service Provider: Build on Lessons Learned by Energy Utilities, *ESRI Telecom Connections*, October 2007

Using GPS in Utilities: Accuracy and Applications, *Utility Automation and Engineering T&D*, September 2007

Deploying GWD as Value-Added Extension of GIS, *ESRI Energy Currents*, Spring 2007

Project Management Best Practices for Successful GIS Implementations, *ESRI Electric and Gas User Group* 2005

Custom Cost Engine Solutions with Designer, presented at *Miner & Miner User Group* 2005

GPS Tools for Field Editing, presented at *Miner & Miner User Group* 2004

Interpolation of Population Related Polygon Data, (Co-authors Doug Atkinson and Anita Russo), *ESRI User Conference* 1997