

# JONATHAN W. LOWE

## SUMMARY

---

Systems integrator with broad spatial data management experience who started two companies and lead design and delivery of national government solutions each earning \$15 million for previous employers.

## EXPERIENCE

---

2011-Present      DELOITTE FINANCIAL ADVISORY SERVICES LLP      Boston, Massachusetts

*Manager, Geospatial Analytics Practice*

- Deliver spatial data inventory and analysis systems to Federal agencies such as FCC and DoD.
- Advise commercial GIS companies on geospatial market trends and expansion strategies.

2008-2010      GISWEBSITE LLP      London (UK), San Francisco & Boston (US)

*Owner of Spatio-temporal & Semantics Systems Integration Consultancy (www.giswebsite.com)*

- Solution Architect for England's Rural Payments Agency \$15mil 2-year GIS and Workflow upgrade and integration project for 1,500 operational staff and 106,000 farming customers.
- Integrate geospatial data and analysis into Google/Metaweb's semantic web platform: Freebase.

2005-2007      IBM (United Kingdom)      London, UK

*Spatio-temporal Technical Lead for IBM's Global Business Services*

- Technical Lead for UK Dept. for Environment, Food & Rural Affairs \$14mil 2-year contract.
- Direct 15-25 developers to implement a national spatio-temporal information repository.

2001-2004      IBM (via Informix acquisition)      San Francisco, California

*GIS Specialist for Business Consulting Services Division (2004)*

- GIS Team Lead for USDA FSA \$50mil 5-year business process modernization contract.
- Hire, train and lead a 7-member GIS Team to reach successful 9-month deliverable goal.

*Senior IT Specialist for DB2/Informix Spatial Extender Technology (2001-2003)*

- Worldwide Pre-sales Support for IBM's Spatial Database products and solutions.

2000-2001      INFORMIX SOFTWARE, INC.      Oakland, California

*Technical Marketing Manager and Evangelist for Spatial DataBlade Products*

- Designer and implementer of proof-of-concepts for geospatial VLDB contracts.
- Developer of pre-sales web-based marketing demonstrations for public sector opportunities.
- Conference speaker/demonstrator (domestic and international).

2000-2005      GEOSPATIAL SOLUTIONS MAGAZINE      Eugene, Oregon

*Freelance monthly columnist covering emerging geospatial technologies and industry trends*

- Writer of over 50 articles demystifying buzzword technologies for geospatial decision-makers.

1995-2000      LOCAL KNOWLEDGE CONSULTING      Berkeley, California

*Owner of Geographic Information Systems Consulting Company*

- Consultant & Project Manager for City of Oakland's GIS inception, development and launch.
- Internet developer of Oakland Unified School District's public Internet "School-Finder" site.

1987-1988      HURRICANE ISLAND OUTWARD BOUND SCHOOL      Coastal Maine

*Instructor on multi-week sailing expeditions in 30-foot gaff-rigged open "pulling boats".*

## EDUCATION

---

1983-1987	HAVERFORD COLLEGE	Haverford, Pennsylvania
	B.A., Geology (Metamorphic Petrology)	
Summer, 1985	SEA EDUCATION ASSOCIATION	Woods Hole, Massachusetts
	Oceanography, Nautical Science and Maritime History on 125-foot R.V. Westward	
Summer, 1986	GEORGIA STATE UNIVERSITY	Dillon, Montana
	Geologic Field Mapping	
Summer, 1986	FAIRLEIGH DICKINSON UNIVERSITY	St. Croix, US Virgin Islands
	Oceanographic Geology Field Training	
Summer, 1989	HARVARD UNIVERSITY	Cambridge, Massachusetts
	Harvard Graduate School of Design – Career Discovery in Architecture	
1990-1993	UNIVERSITY OF CALIFORNIA, BERKELEY	Berkeley, California
	M.A. Landscape Architecture (Sustainable Design)	
1996-1999	U. C. BERKELEY EXTENSION	Berkeley, California
	C Programming for Business Applications. Introduction to Visual Basic Programming. UNIX System Administration and Shell Scripting Introduction to Photogrammetry & Remote Sensing. Java: Discovering Its Power.	
Spring, 2010	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Cambridge, Massachusetts
	Water and Sanitation in Developing Countries.	
Fall, 2010	WELLESLEY COLLEGE	Wellesley, Massachusetts
	Introduction to Machine Organization – the hardware/software interface.	

## TECHNICAL SKILLS

---

### Programming Language Experience:

C Language (e.g. Ports of UMN's Mapserver to unsupported AIX and FreeBSD platforms)  
Database programming: Triggers/Procedures in PostgreSQL and Informix databases.  
ESRI's MapObjects (in conjunction with Microsoft's Visual Basic) and Avenue languages.  
Javascript 1.5 (e.g. with MetaCarta's OpenLayers) in Firefox, Safari and Internet Explorer.  
Perl with modules such as CGI, DBI, graphics manipulation modules, LWP, and Regular Expressions.  
UNIX shell programming (korn shell, c shell, bourne shell).  
Visual Basic, version 5.0/6.0 and associated Win32 API programming.

### Software and Database Experience:

Databases: PostgreSQL and PostGIS, Oracle 10g, IBM's DB2, and Informix Dynamic Server.  
Dynamic HTML and graphics generation via a variety of architectures and (open) software packages.  
ESRI's ArcGIS 9.x: Arc/Info, ArcView, ArcSDE, MapObjects, and various extensions.  
Safe Software's Feature Manipulation Engine (FME).  
MetaCarta's OpenLayers (Javascript modules).  
UMN's Mapserver and Mapscript libraries.

### Hardware and Operating Systems Experience:

Hardware platforms: SUN UltraSparc-80, IBM's p-595, and HPUX L-class.  
LINUX operating system: RedHat/Fedora Core, FreeBSD, Gentoo.

## PROFESSIONAL AFFILIATIONS

---

- OGETA (Open Geodata Consortium) Board of Advisors, 2001-2006.
- BAAMA (Bay Area Automated Mapping Association) member, 1996-2002.

## NOTEWORTHY PROJECTS AND CLIENTS

---

- AT&T, Wireless Telecommunications:
  - Dynamic spatial model of US ground-site telecom towers' call volumes.
- Bay Area Rapid Transit Department (BART):
  - Geospatial inter-application document management and inventory.
- City of Berkeley, California, and City of Santa Rosa California:
  - Interactive Internet-based parcel notification application (Berkeley).
  - Emergency response and permit-tracking interactive intranet maps (Santa Rosa).
- County of Alameda, Department of Public Works:
  - Water Well Inventory Application for Arcview.
- Department of Defense's Military Health System (DoD MHS):
  - Analyze medical care from 350 hospitals and clinics to 9.6 million military beneficiaries.
- England's Rural Payments Agency (RPA):
  - Upgrade and integration of GIS and workflow systems for land parcel management.
- Federal Communications Commission (FCC):
  - Broadband data consolidation and analysis for 56 US States and Territories.
- Kaiser Permanente:
  - Best-path networking program for new hospital site selection.
- Middle Eastern Architecture & Engineering client:
  - Advise on geospatial market trends in 14 verticals and recommend growth strategies.
- Oakland Unified School District, Technical Services Department:
  - Public web mapping of student/school assignment by address (School-Finder).
- TeleAtlas North America/Europe:
  - Data cleansing of geocodable database for entire North American street network.
- U.K. Department for Environment, Food and Rural Affairs (DEFRA):
  - National Spatio-temporal Information Repository and multi-format data access point.
- U.S. Bureau of Land Management (BLM):
  - Automatic vertical data integrity of survey/boundary datasets.
- U.S.D.A. Farm Service Agency (FSA):
  - Business Process Reorganization design with centralized data and processing.

## NOTEWORTHY CONFERENCE SPEAKING ENGAGEMENTS AND ATTENDANCE (1995-2008)

---

- Arcview Regional Users Group presenter, 1996 & 1998-2002 (San Francisco Bay Area)
  - Present: Avenue programming, Geodatabase Overview, Spatial web design, etc.
- Bay Area Automated Mapping Association presenter (San Francisco Bay Area)
  - Present: Public Internet mapping, User-interface issues for web maps, etc.
- ESRI Business Partners Conference, presenter 2002 (Palm Springs, CA)
  - Present: Tuning and configuring ArcSDE for IBM's DB2 and Informix databases.
- ESRI EMEA User Conference, presenter 2001 (Lisbon, Portugal)
  - Present: The advantages and challenges of databases for spatial data management.
- ESRI International User Conference attendee 1995-2003, presenter 1997 & 1999-2002:
  - Present: Internet GIS, Geodatabase migration, Spatio-temporal data issues, etc.
- ESRI Latin America Conference, presenter 2000 (San Jose, Costa Rica)
  - Present: Modeling our world using spatial databases.
- IBM/ESRI Homeland Security Symposium (Five U.S. cities)
  - Present: IBM's federated database solutions to government attendees.
- OGETA Forum and GITA Southeast (keynote), presenter 2001 (Atlanta, GA)
  - Present: Modeling your business cases with geodatabases.
- O'Reilly Where 2.0 Conference, presenter 2008 (Burlingame, CA)
  - Mainstage presentation (video at [blip.tv/file/969298](http://blip.tv/file/969298)) on Metaweb's Freebase.
- Stanford Business School, presenter 2003 (Stanford University, CA)
  - Present: Market trends in spatial information management.

*In Geospatial Solutions Magazine:*

- Geospatial Knowledge Management (Nov 2005)
- Google Sparks Search Wars (Oct 2005)
- Web Mapping Hacks (Sep 2005)
- Tools Rush In (Aug 2005)
- A Geospatial Semantic Web (Jul 2005)
- Web GIS Gets Flashy (May 2005)
- JPEG 2000: Good Things in Smaller Packages (Apr 2005)
- Ordnance Survey's Master Map (Mar 2005)
- Geospatial Disaster Relief (Feb 2005)
- Spatial Technical Trends for 2005 (Jan 2005)
- Merging National Street Network Datasets (Nov 2004)
- Reveling in Raster Data (Oct 2004)
- Inside Spatial Server Hardware (Sep 2004)
- Geospatial Web Portals (Jul 2004)
- Sizing Up the Mighty Mote (May 2004)
- Bone Rooms, Bird Bodies, and Biodiversity Informatics (Apr 2004)
- GIS Through the Looking Glass: Terminal Services and Thin Client GIS (Mar 2004)
- Spatial Trends and Drivers in Insurance Loss Modeling (Feb 2004)
- Pricing Emerging Web Services (Jan 2004)
- Special Handling of Spatio-Temporal Data (Nov 2003)
- Spatial Decoupled Architectures: Holding Back the Tiers (Oct 2003)
- Emerging Spatio-Temporal Database Research: Fresh Ideas on Santorini Island (Sep 2003)
- Exploratory Spatial Data Analysis: Emerging tools and concepts (Jul 2003)
- Other People's Data and Wiki Web Sites (Jun 2003)
- Bottom Line in the Land of Oz -- Pricing Spatial Website Architectures (May 2003)
- A Date with Replication: Distributed Database Systems (Apr 2003)
- Speaking of Weather for Spatial Decision Support (Mar 2003)
- Flexible Data Models Strut the Runway (Feb 2003)
- Technical Trends in the Geospatial Industry (Jan 2003)
- Uniting Finders and Keepers of Spatial Data (Nov 2002)
- Map Me a Reason: Purposeful Geospatial Work (Oct 2002)
- The Anatomy of Web Map Services (Sep 2002)
- Homeland Homework: Reconfiguring for Wider Spatial Integration (Jul 2002)
- Spatial on a Shoestring: Leveraging Free Open-source Software (Jun 2002)
- Mobile Enterprise Act Three: The Backstage Crew (May 2002)
- Mobile Enterprise Act Two: The Props (Apr 2002)
- Mobile Enterprise Act One: The Players (Mar 2002)
- GIS Meets The Mapster (Feb 2002)
- Basemapping's Big Three: It's Not Your Father's TIGER (Jan 2002)
- The Real-Time Continuum (Nov 2001)
- Optimal Performance Art of Spatial Mechanics (Sep 2001)
- ASPs and Third World Labor (Jun 2001)
- 3D Flythroughs: It's Child's Play (Apr 2001)
- Which Where Will Win? Dueling Wireless Location Solutions (Mar 2001)
- The Power of Babble: Congregating around LBS (Feb 2001)
- Geospatial Data Modeling Sailing into Port (Jan 2001)
- An Internet Safari Through the Geography Network (Nov 2000)
- The Image-Conscious Internet (Oct 2000)
- Spinning Straw into Gold: Data Warehouses and Spatial Web Sites (Sep 2000)
- One-World Web Map (Jul 2000)
- Maps in Motion: Spatial Data on Mobile Devices (Jun 2000)

*In Geo Info System Magazine:*

- What the XML are Scalable Vector Graphics? (May 2000)
- Building a Spatial Web Site? Know Your Options (Apr 2000)
- Utilities Databases Internet (Mar 2000)
- Safe Spatial Surfing: Proceed with Caution (Feb 2000)
- Untangling the Web: An Internet Primer (Jan 2000)
- Looking Good Online: Designing an Effective GIS Web Site (Oct 1999)