

JONATHAN W. LOWE

SUMMARY

Analytics strategist with 25+ years of consulting experience. Envisions, sells, builds and manages fresh approaches to data-driven decision making for biopharma, agriculture, retail, supply chain and telcom clients. Unlocks value by bridging business and technical cultures. Thrives when growing new teams.

EXPERIENCE

- 2019-Present PFIZER Cambridge, Massachusetts
- Data Science Lead, Pfizer Global Supply – Digital Manufacturing*
- Use machine learning, network analysis and Natural Language Processing to isolate root causes of volatility, predict batch release times, prescribe schedules and alert users to noteworthy trends
 - Boost release attainment from 17% in 2018 to 77% in 2019 at a top-10 manufacturing site
- 2013-2018 BOSTON CONSULTING GROUP Boston, Massachusetts
- Principal Data Scientist, GAMMA (Co-founder, Operations lead)*
- Grow a new cohort from 10 to 500+ data scientists serving Fortune 1000 Operations clients
 - Lead technical launch of BCG's first firm-wide data visualization/analytics product on AWS
 - Aggressively go to market using creative video production and interactive web demonstrations
- 2011-2012 DELOITTE FINANCIAL ADVISORY SERVICES LLP Washington, DC
- GeoAnalytics Manager, Federal Analytics Practice*
- Market, manage and deliver newly launched geospatial and network analytics practice at Deloitte
 - Analyze disparate FCC datasets to identify regions of the US most in need of broadband roll-out
- 2008-2010 GISWEBSITE LLP London, England
- Founder and owner of Spatio-temporal Systems Integration Consultancy*
- Integrate location data and analytics into Google/Metaweb's semantic web platform: Freebase
 - Overhaul the UK RPA's farm subsidy payment system in \$15mil project for 106,000 farmers
- 2001-2007 IBM San Francisco, California & London, England
- Technical Lead for IBM's Global Business Consulting Services Division*
- Direct 15 developers to implement UK DEFRA portal for managing livestock, land and farmers
 - Modernize the USDA FSA's data, systems and business processes in a \$50mil, multi-year project
- 2000-2001 INFORMIX SOFTWARE, INC. Oakland, California
- Worldwide Technical Pre-Sales Supporter and Evangelist for DataBlade Products*
- Designer and implementer of proof-of-concepts for location-aware, very large database contracts
- 1995-2000 LOCAL KNOWLEDGE CONSULTING Berkeley, California
- Founder of geospatial data management and application development consultancy (12 direct reports)*
- Consultant & Project Manager for City of Oakland's GIS inception, development and launch
 - Publish 50+ articles demystifying technical industry trends in a 29,000-subscriber trade journal
- 1987-1989 HURRICANE ISLAND OUTWARD BOUND SCHOOL Coastal Maine
- Instructor on multi-week sailing expeditions in 30-foot gaff-rigged open "pulling boats"*

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EDUCATION

1983-1987	HAVERFORD COLLEGE	Haverford, Pennsylvania
	B.A., Geology (Metamorphic Petrology)	
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 (dept. for Geographic Information Systems lab)	
1996-1999	UNIVERSITY OF CALIFORNIA BERKELEY EXTENSION	Berkeley, California
	UNIX system administration; Programming in C, Visual Basic, and Java	
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:

Python Language (most frequently for ETL, graph data manipulation and optimization with PuLP).
Database programming: Triggers/Procedures in PostgreSQL and Oracle databases including PL/R.
Javascript (e.g. with D3 & CartoDB libraries) in Chrome, 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) and system administration.
Formerly expert in C, Visual Basic, Win32 API programming and Java at their peaks of fashion.

Software and Database Experience:

Data analysis and visualization platforms: AIMMS, Alteryx, Carto, D3, HighCharts, R, and Tableau.
Databases: PostgreSQL and PostGIS, Oracle 11g, Informix Dynamic Server, MySQL and IBM's DB2.
Dynamic HTML and graphics generation on a variety of architectures and (open) software packages.
GIS platforms: CartoDB, ESRI's ArcGIS 10.x (incl. Network Analyst), Quantum GIS and MapServer.

Hardware and Operating Systems Experience:

Hardware platforms: AWS cloud computing (including Redshift), SUN, IBM, and HP-UX hardware.
LINUX operating system: RedHat/Fedora Core, Ubuntu, FreeBSD and Gentoo.

SAMPLING OF PUBLICATIONS (In *Geospatial Solutions Magazine*, 1999-2018)

- Turning Visibility into Value in Digital Supply Chains (Jan 2018)
- A Geospatial Semantic Web (Jul 2005)
- Sizing Up the Mighty Mote (May 2004)
- Spatial Trends and Drivers in Insurance Loss Modeling (Feb 2004)
- Exploratory Spatial Data Analysis: Emerging tools and concepts (Jul 2003)
- Speaking of Weather for Spatial Decision Support (Mar 2003)
- The Anatomy of Web Map Services (Sep 2002)
- ASPs and Third World Labor (Jun 2001)

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SAMPLING OF PROJECTS AND CLIENTS

- Biopharmaceutical clients (US, Confidential):
 - Build control towers to pinpoint and predict volatile manufacturing processes and stabilize plans.
- Coffee Producer client (US, Confidential):
 - Optimization of direct store delivery model unlocks \$8M in potential savings.
- Department of Defense's Military Health System (DoD MHS):
 - Align medical care from 350 hospitals and clinics to 9.6 million military beneficiaries' locations.
- Discount Variety Store client (US, Confidential):
 - Defer double-digit millions in network costs via post-acquisition shared DC capacity.
- Electric energy distribution network client (US, Confidential):
 - Automate design of primary conductor line expansion for joint funding negotiations.
- England's Rural Payments Agency (RPA):
 - Upgrade and integrate GIS and workflow systems for subsidy payments by land parcel hectareage.
- Federal Communications Commission (FCC):
 - Broadband data consolidation and analysis for 56 US States and Territories.
- Grocery Store Chain client (US, Confidential):
 - Footprint expansion based on shopping area catchment and demographic analysis.
- Middle Eastern Architecture & Engineering client (EMEA, Confidential):
 - Advise on geospatial market trends in 14 verticals and recommend growth strategies.
- National Broadband Network Company, Australia (NBN Co):
 - Strategic review of nationwide broadband technology roll-out identifying \$32bil in savings.
- Office supply delivery network optimization for merger integration plan (US, Confidential):
 - Quantification of over \$1mil per metro area cost savings from fleet routing efficiencies.
- Postal Supply Chain client (Scandinavia, Confidential):
 - Optimizing a national postal logistics supply chain and last-mile fleet exposed 37% cost savings.
- Telecommunications Repair and Maintenance client (Malaysia, Confidential):
 - Proved that over half of copper cable yards could be closed with no effect on coverage rate.
- U.K. Department for Environment, Food and Rural Affairs (DEFRA):
 - National Spatio-temporal Information Repository and multi-format data access point.
- U.S.D.A. Farm Service Agency (FSA):
 - Business Process Reorganization design with centralized data and processing of farm subsidies.
- Wireless Telecommunications client (US, Confidential):
 - Boost revenue by adjusting tower coverage to match locations of high-value customer segments.

NOTEWORTHY CONFERENCE SPEAKING ENGAGEMENTS (2000-2017)

- Gartner Data Analytics Summit 2017 (Grapevine, TX)
 - Presentation: "Solving for Where: Profitable Location Intelligence".
- BCG Telecommunications, Media and Technology Worldwide Practice Area meeting 2014 (Budapest)
 - Presentation: GeoAnalytic simulation of telecommunications technology roll-out.
- BCG Asia Pacific Functional Advantage Conference presenter 2014 (Hong Kong)
 - Presentation: GeoAnalytics – Look at the world differently with Meridian, today.
- BCG North America Functional Advantage Conference presenter 2013 (Chicago)
 - Presentation: Big Data Introduction – Advanced Analytics
- O'Reilly Where 2.0 Conference, presenter 2008 (Burlingame, CA)
 - Mainstage presentation on semantic database applications using Metaweb's Freebase.
- Stanford Business School, presenter 2003 (Stanford University, CA)
 - Presentation: Market trends in spatial information management.
- ESRI Business Partners Conference, presenter 2002 (Palm Springs, CA)
 - Presentation: Tuning and configuring ArcSDE for IBM's DB2 and Informix databases.
- OGETA Forum and GITA Southeast (keynote), presenter 2001 (Atlanta, GA)
 - Presentation: Modeling your business cases with geodatabases.