

STEVEN R. BRATT

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Resume on the Web: <http://www.thinkabit.com/SBrattResume.html>

Chief Executive / Emerging Technologies / World Wide Web

Dynamic, innovative leader with 23 years of proven success in launching and strengthening complex, international, high-tech organizations in non-profit and for-profit enterprises.

- ❖ **Directing Ventures of Global Importance.** Currently, CEO of the World Wide Web Consortium (W3C). Previously, guided creation of a UN arms control organization, an unparalleled global treaty monitoring system, and a surveillance technology group within a major systems integrator.
 - ❖ **Effectively Managing Non-Profit Finances.** Re-energized W3C by driving new Web technology areas, strengthening customer focus, reducing expenses by 25%, and increasing fee-paying membership by 30%. Planned and executed \$25 million/year budget within a UN organization. Expanded DARPA R&D program from \$15 to \$40 million/year.
 - ❖ **Motivating the Best from Diverse Organizations.** Led W3C's staff and offices in 20 countries, serving 430 of the world's leading IT companies and organizations across 40 countries. Led a UN organization with 100 staff from 40 countries. Accomplished leader in cross-cultural and politically-sensitive environments, where consensus-building, and clear and decisive action, are vital.
 - ❖ **Applying Emerging Technologies.** Strategically leveraged the Web, service-oriented architectures, expert systems, mobile and other advanced technologies, before most leaders embraced them.
 - ❖ **Ph.D.:** Massachusetts Institute of Technology. **B.S.:** Pennsylvania State University.
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Professional Experience

Chief Executive Officer

World Wide Web Consortium (W3C)
(hosted at the Massachusetts Institute of Technology)

January 2002 - present
Cambridge, Massachusetts, USA

Founded in 1994 by Web inventor Tim Berners-Lee, the World Wide Web Consortium is the global center for Web standards, including all of the technologies that make the Web work: HTML, XML, Web Services, Web 2.0 and many others. Dr. Bratt's focus on responsible management and growth in new technology areas strengthened the health and importance of the Consortium following a period of challenges.

Executive Responsibilities:

- Strategic and budget planning, and overall Consortium operations.
- Leading a team of 70 of the world's foremost Web technologists (including 13 management personnel), and 21 Offices around the globe (newest: China, India, South Africa, Brazil).
- Coordinating the W3C standards process, executed by 1,500 experts working in 60 groups.
- Relations with W3C's 430 Member organizations, including the world's top technology companies:
Among W3C's Members: Adobe, Alcatel-Lucent, Apple, AstraZeneca, AT&T, Avaya, Boeing, BT, Canon, Chevron, Cisco, Citigroup, Deutsche Telecom, Disney, Dow Jones, EDS, Eli Lilly, EMC, Ericsson, France Telecom, Fujitsu, Google, Hitachi, HP, IBM, ILOG, Intel, Lockheed Martin, Merck, MITRE, Nokia, Nortel, NTT, Nuance, Oracle, Pfizer, RedHat, RIM, Samsung, SAP, Sharp, Siemens, SoftwareAG, Sun, Time Warner/AOL, Toshiba, Verisign, Vodafone, Xerox, Yahoo and other leading companies, universities, non-profits and government agencies.
- Liaisons with over 40 national, regional and international standards organizations.
- Chairing and program planning for large conferences, oversight of legal matters and interface with W3C's Advisory Committee, Advisory Board and Steering Committee.

Selected Accomplishments (*World Wide Web Consortium, continued*):

- Increased Membership by 30% and reduced spending by 25% to bring health to an organization that fell into substantial deficit following the downturn in the technology sector.
- Improved relations with customers (Members) and other standards organizations.
- Implemented industry-leading patent policy.
- Launched Incubator Activity to encourage development of innovative, often high-risk technologies.
- Oversaw the evolution of the standards that make today's Web work, including HTML, XML, CSS, VoiceXML, RDF, OWL, Web accessibility, internationalization, privacy and other areas.
- Started leading-edge work on emerging standards in SOA/Web services, Web 2.0, semantic Web (Web 3.0), mobile Web, ubiquitous Web, video, security, and health care and life sciences.
- Currently developing concepts for new revenue streams through fostering social networks, selling services and drawing upon DNS revenue.

President and General Manager
Thinkabit, LLC

January 2003 - present
Winchester, Massachusetts, USA

Thinkabit provides consulting services (several days per year, and without conflict with position as CEO of the W3C) in areas that include: Strategic planning; leadership; organizational development; consensus building; patents; scientific and technical review; and application of advanced technologies to improve process and productivity. Key technology areas: World Wide Web, arms control, sensor networks.

Coordinator, International Data Centre Division (IDC)
Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)

July 1997 – November 2001
Vienna, Austria

The CTBTO is a UN-affiliated organization, was founded in 1997 to build and operate a global treaty verification regime to detect and deter global nuclear weapons testing. The IDC collected 10 Gbytes per day of digital data from hundreds of geophysical sensors dispersed across all continents. Knowledge-based data fusion and human decision support were applied to detect, locate and identify geophysical phenomena, including possible nuclear explosions. The Global Communications Infrastructure (GCI), the first VSAT satellite telecommunications system to cover the globe, provided Internet-based data collection from the 321 sensors and SOA and Web-driven product distribution to 100 national data centers.

Executive Responsibilities:

- Appointed as the first Coordinator of the new CTBT International Data Centre, including the Global Communications Infrastructure.
- One of two senior US executives in charge of starting the new Organization, and of communicating the vision and progress to US and global dignitaries.
- Led systems design and deployment, strategic program and budget planning (\$15 million, growing to \$25 million, per year), information security, and measurement-based quality assurance.
- Directed five cross-divisional teams to implement state-of-health and knowledge management systems that communicated through open public, secure external and private intranet Web portals.

Selected Accomplishments:

- Implemented, what was at the time, the most sophisticated geophysical data collection and real-time analysis system in the world.
- Guided the IDC and GCI from concept to initial operation within two years.
- Hired and managed 100+ staff members from 40+ nations.
- Designed and implemented operational and research facilities for the CTBTO's 250 staff. Included in the facility were high-availability, 24/7, computing, situation and media centers (\$11+ million).
- Installed three major releases of data acquisition and knowledge-based processing software, using technologies such as C++, Java, Oracle, HTML, XML, PKI, LDAP, Unix and Windows.

Principal Program Director / Program Manager
Office of the Secretary of Defense (OSD)
Defense Advanced Research Projects Agency (DARPA)

May 1993 – July 1997
Arlington, Virginia, USA

Executive Responsibilities:

- Directed a \$15 million, growing to \$40 million, per-year research and development program to improve US and global capabilities for verification of nuclear weapons test ban treaties.
- Integrated advanced concepts for realtime sensor surveillance and intelligent data processing. Specific technologies incorporated included global telecommunications, knowledge-based data fusion, artificial intelligence, data visualization, the Web, seismology, hydroacoustics, infrasonics, nuclear physics, meteorology and satellite imagery.
- In 1996, moved to the office of the Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Matters to support the Comprehensive Nuclear-Test-Ban Treaty negotiations in Geneva.
- Served on numerous bi- and multi-lateral scientific and arms control delegations.

Selected Accomplishments:

- Led team of over 100 contracted scientific and engineering professionals to develop an integrated system for collection, fusion and analysis of multi-sensor data to monitor nuclear weapons testing. The system was successfully demonstrated during international experiments starting in 1995.
- Extended monitoring concepts to address other important national security problems, including Interneted surveillance of underground facilities, damage assessment and battlefield assets.
- The US Ambassador responsible for the CTBT negotiations stated that a briefing given by Dr. Bratt to the international delegations in Geneva did more to advance agreement on the proposed treaty verification regime than any prior event.

Assistant Vice-President / Director of Systems and Support
Science Applications International Corporation (SAIC)
Center for Monitoring Research

June 1989 – May 1993
Arlington, Virginia, USA

Responsibilities and Accomplishments:

- Led 10, growing to 20, scientific and IT professionals to design, implement, operate and improve advanced geophysical, realtime processing systems.
- Led installation and operation of a prototype International Data Center which performed successfully during a major, worldwide monitoring experiment in 1991.
- Prototyped advanced concepts for pre-Web client-server-based data mining and browsing tools.
- Directed international training, staffing, procurement, monitoring operations and customer support.
- Presented successful, strategic funding proposals and reports to high-level US and global officials.
- Developed new business areas for the division.

Geophysicist and Project Leader
Science Applications International Corporation (SAIC)

February 1985 – June 1989
San Diego, California, USA

Responsibilities and Accomplishments:

- First employee in a division that grew to become the largest geophysical consulting organization supporting US nuclear treaty verification programs.
- Principal designer and task leader for the Intelligent Monitoring System, which integrated automated, realtime, artificial intelligence systems and interactive analysis and decision support.
- Directed teams of 2 to 5 scientists and software engineers.
- Led and conducted research and software development in areas including network capability monitoring; source properties and propagation; and tectonic stability and hazards assessment.

Education

- **Massachusetts Institute of Technology:** PhD, Geophysics (1985)
- **Pennsylvania State University:** BS, Geological Sciences (1979)
- Harvard Kennedy School of Government, Executive Management Program (2000)
- Federal Executive Institute, Leadership in a Democratic Society (1996)

Other International and Inter-Agency Experience:

- National Science Foundation Review Panel (2004)
- US Delegation, Conference on Disarmament, Geneva (1993 – 1996)
- Scientific Advisor, Comprehensive Nuclear-Test-Ban Treaty Negotiations, Geneva (1994 – 1996)
- Department of Defense Liaison, National Academy of Sciences (1993 – 1997)
- Held US DoD security clearances ranging from Secret to Top Secret / SCI (1985 – 1997)

Selected Honors:

- Appointed Guest Professor, Beihang University, Beijing, China (2007 – 2012)
- Exceptional Civilian Service, US Department of Defense (1997)
- Outstanding Performance, Office of the Secretary of Defense (1993, 1994, 1995, 1996)
- Recognized Paper Award: Conference on Innovative Applications of Artificial Intelligence (1991)

Publications:

Dr. Bratt has authored more than 80 refereed publications, technical reports, published conference abstracts, and papers tabled within international organizations. He is frequently invited to give talks and chair meetings. (complete list: <http://www.w3.org/2004/06/SBrattPubs.html>). Selected publications:

- Bratt, S.R. (2005) "Toward a Web of Data and Programs", [Proceedings](#) of the *IEEE Symposium on Global Data Interoperability--Challenges and Technologies*, May 2005, pp. 124 - 128 ([paper](#), [invited talk](#)).
- Bratt, S.R. (2005) "Developing The Foundational Standards for Web Services", Gartner Conference, Los Angeles, California, USA ([invited talk](#)).
- Bratt, S.R. (2004) "Developing Core Web Services Standards at the W3C", Gartner Conference, Orlando, Florida, USA ([invited talk](#)).
- Bratt, S.R. (2004) "Weaving a Web for the Next Generation of Science", Geological Society of America, Denver, Colorado, USA ([invited talk](#)).
- Bratt, S.R. (2001) "Arms Control in the Information Age: World-Wide Data Acquisition, Analysis, Storage and Access in Near-Realtime", *Proceedings of the IEEE Symposium on Mass Storage Systems: Mass Storage and the Web*, April 2001 ([invited talk](#)).
- Bratt, S.R. (1992) "GSETT-2: An International Experiment in Rapid Exchange and Interpretation of Seismic Data from a Global Network", *EOS Trans. Amer. Geophys. Un.*, **73**, pp. 513, 520.
- Bratt, S.R., H.J. Swanger, R.J. Stead, F. Ryall, and T.C. Bache (1990), "Results from the Intelligent Monitoring System", *Bull. Seis. Soc. Am.*, **80**, pp. 1852 - 1873.