Scott Bradner - resume

WORK EXPERIENCE

- Senior Technology Consultant, Office of the CTO, <u>Harvard University</u>, Cambridge, MA, 2012 to present. Exploring, developing and upgrading technology at Harvard, monitoring changing technology trends and exploring their potential for use at Harvard. Current focus is on implementing cloud-based identity and access management applications.
- University Technology Security Officer, Office of the CTO, <u>Harvard University</u>, Cambridge, MA, 2011 to 2012.
- University Technology Security Officer, Office of the CIO, <u>Harvard University</u>, Cambridge, MA, 2008 to 2011. Developed and maintained university IT security policies, assessed compliance with such policies, provided advice on IT security issues.
- University Technology Security Officer, Office of the Assistant Provost for <u>Information Systems</u>, <u>Harvard University</u>, Cambridge, MA, 2004 to 2008.
 Developed and maintained university IT security policies, assessed compliance with such policies, provided advice on IT security issues.
- Senior Technical Consultant, Office of the Assistant Provost for <u>Information Systems</u>, Harvard University, Cambridge, MA, 1996 to 2008. Assist Assistant Provost in ascertaining the implications of advanced technology on the University, served as a liaison to various University groups dealing with technology issues.
- Senior Technical Consultant, Office for Information Technology (OIT), Harvard University, Cambridge, MA, 1989 to 1996. Design data networks, install and operate production gateways, served as OIT liaison to external organizations, oversee installation of fiber infrastructure, develop network based applications, develop recommendations on security and privacy, document existing Harvard network and network support organization.
- Founded and managed the Harvard Network Device Test Lab, 1988 to 1999.
- Senior Technical Consultant, <u>Psychology Department</u>, Harvard University, Cambridge, MA, 1975 to 1990. Managed computer facility consisting of UNIX computers, PCs and Macintosh computers, developed phototypesetting facility, designed and installed first Harvard campus data network and designed the Longwood Medical Area Network.
- Computer Programmer, Psychology Department, Harvard University, Cambridge, MA, 1966 to 1975. Co-developed real-time operating system and designed special hardware to support real-time research experiments.
- Computer Programmer, Information International Incorporated, Cambridge, MA, 1964 to 1965. Worked on film scanning systems.



• Lab technician, Children's Hospital Cancer Institute, Boston, MA, 1964.

TEACHING

- Instructor, <u>Harvard University Extension School</u>, from 1995 to the present.
 Teaching classes in <u>Technology, Security, Privacy, and the Realities of the Cyber World</u>. Previously taught <u>Advanced Topics in Data Networking Protocols and Network Architecture</u> and <u>Security, Privacy, and Usability</u>, also at the Harvard University Extension School
- Tutorial Instructor, <u>Networld + Interop</u>, from 1990 to 2001. (Now known as Interop.) Taught classes in multiprotocol enterprise and Internet service provider data networking.
- Tutorial Instructor, <u>IBM Corporation</u>, from 1990 to 1995. Taught classes in advanced TCP/IP data networking.
- Senior Preceptor, Harvard University, 1982 to 1990. Taught classes in the use of computers in psychology and supervised special projects in computer and networking electronics and in computer programming.

CONSULTING

Consultant on network design, management and security to educational institutions, Federal agencies, international telecommunications enterprises and commercial organizations ranging from Fortune 500 companies to small businesses, 1989 to present. Served as an Expert Witness in the Communications Decency Act challenge in the U.S. Federal court and in a number of patent cases.

PATENTS:

US Patent <u>4,799,262</u> - *Speech Recognition* (with Joel A. Feldman and William F. Ganong, III) 1989

AWARDS:

- The <u>Jonathan B. Postel Service Award</u> from the <u>Internet Society</u>
- The <u>Petra T. Shattuck Excellence in Teaching Award</u> from the <u>Harvard</u> University Extension School

ORGANIZATIONS

Internet Engineering Task Force (IETF)

- Member, <u>IETF Administrative Oversight Committee</u> (IAOC) of the <u>IETF Administrative Support Activity</u> (IASA), (2012 to present)
- Co-Chair, Operations and Management Area Working Group (opsawg), (2007 to present)
- Co-Chair, <u>Authority-to-Citizen Alert Working Group</u> (atoca), (2010 to 2012)



- Co-Chair, <u>Congestion and Pre-Congestion Notification Working Group</u> (pcn), (2007 to 2012)
- Co-Chair, <u>Internet Emergency Preparedness Working Group</u> (ieprep), (2002 to 2007).
- Liaison between IETF and ITU-T, (1995 to 2009).
- Chair, New IETF Standards Track Discussion Working Group (newtrk), (2004 to 2006).
- Member, IETF Internet Engineering Steering Group (1993 to 2003).
- Co-Director, Sub-IP Area (2001 to 2003).
- Co-Chair, Transport Area Working Group (tsvwg), (1999 to 2003).
- Co-Director, Transport Area (1997 to 2003).
- · Co-Director, IPng Area (1993 to 1996).
- Co-Director, Operational Requirements Area (1993 to 1997).
- Chair, Benchmarking Methodology Working Group (bmwg), (1990 to 1993).
- Edited or co-edited many IETF process and IPR documents (<u>RFC 2026</u>, <u>RFC 2028</u>, <u>RFC 2418</u>, <u>RFC 2436</u>, <u>RFC 2438</u>, <u>RFC 2690</u>, <u>RFC 2691</u>, <u>RFC 3113</u>, <u>RFC 3131</u>, <u>RFC 3233</u>, <u>RFC 3356</u>, <u>RFC 3427</u>, <u>RFC 3667</u>, <u>RFC 3668</u>, <u>RFC 3978</u>, <u>RFC 3979</u>, <u>RFC 4053</u>, <u>RFC 4748</u>, <u>RFC 4775</u>, <u>RFC 5378</u>, <u>RFC 6756</u>, <u>RFC 7127</u>).
- Maintained and presented IETF newcomers tutorial (2003-present) (IETF meeting: 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92).
- Editor of most cited RFC (RFC 2119).

Internet Society (ISOC)

- Secretary of the Board (2003 to present)
- Vice President for Standards, (1995 to 2003).
- Trustee, (1993 to 1999).

The American Registry for Internet Numbers (ARIN)

- Vice Chair of the Board (2011 to 2012)
- Treasurer (2009 to 2010)
- Secretary of the Board (1997 to 2009)
- Trustee, (1997 to 2012)

IEEE Internet Computing

• Editorial Board, (1999 to 2008).

Wiley Computer Publishing

Wiley Network Council, (1997 to 2000). Technical editing for a number of books including: *Internet Performance Survival Guide*, by G. Huston; *Converged Networks and Systems*, by I. Faynberg; *Network Services Investment Guide: Maximizing ROI in Uncertain Times*, by M. Gaynor; *Network Routing Basics:*



Understanding IP Routing in Cisco Systems, by J. Macfarlane; The NAT Handbook: Implementing and Managing Network Address Translation, by B. Dutcher; and WAN Survival Guide: Strategies for VPNs and Multiservice Networks, by H. Berkowitz

Corporation for Regional and Enterprise Networking, Inc. (CoREN)

• Co-chair, Joint MCI-CoREN Technical Committee (1994 to 1995)

New England Academic and Research Network (NEARnet)

- Co-founder
- Member, Steering Committee (1989 to 1995)
- Chair, Technical Committee (1989 to 1995)

Longwood Medical Area Network

• Chair, Technical Committee (1991 to 1995)

Technical Advisory Boards

I have been on over two dozen technical advisory boards over the years.

Member, ACM, IEEE, ISOC

SELECTED PUBLICATIONS

Columns

- Net Insider, Network World, 1992 to 2013
- View from the USA, Nikkei Communications, 1997 to 1999

Papers and Articles

- Gaynor, M., L. Lenert, K. D. Wilson and S. Bradner, <u>Why common carrier and network neutrality principles apply to the Nationwide Health Information</u>
 Network (NWHIN), Journal of American Medical Informatics Association, 2013
- Gaynor, M, F. Yu, C. Andrus, S. Bradner and J. Rawn, <u>A General Framework for Interoperability with Applications to Healthcare</u>, Health Policy and Technology, January 2013
- Bellovin, S., S. Bradner, W. Diffie, S. Landau, and J. Rexford., <u>As Simple as Possible But Not More So</u>, Communications of the ACM, August 2011
- Bellovin, S., S. Bradner, W. Diffie, S. Landau, and J. Rexford, <u>Can It Really</u>
 <u>Work? Problems with Extending EINSTEIN 3 to Critical Infrastructure</u>, Harvard
 Law School National Security Journal, May 2011
- Gaynor, M., A. Pearce, S. Bradner, and Ken Post, *Open Infrastructure for a Nationwide Emergency Services Network*, International Journal of Information Systems for Crisis Response Management (IJISCRAM), 2009



- Gaynor, M., and S. Bradner, <u>Statistical Framework to Value Network Neutrality</u>, Media Law & Policy, New York Law School, March 2008
- Gaynor, M. and S. Bradner, <u>Valuing Network Neutrality</u>, Broadband Properties, December 2007
- claffy, kc, S. Meinrath and S. Bradner, *The (un)Economic Internet?*, IEEE Internet Computing, May/June 2007
- Bradner, S., <u>The End of End-to-End Security</u>, IEEE Security & Privacy, March/April 2006
- Goodell, G., M. Roussopoulos and S. Bradner, <u>A Directory Service for</u>
 <u>Perspective Access Networks</u>, Harvard University Computer Science Group
 Technical Report TR-06-06, 2006
- Goodell, G., S. Bradner and M. Roussopoulos, *Building a Coreless Internet* without Ripping out the Core, Hotnets05, November 2005
- Bradner, S. and C. Metz, <u>Guest Editor's Introduction: The Continuing Road</u> <u>toward Internet Media</u>, IEEE Internet Computing, July-August, 2005
- Bradner, S., *Internet governance a train on many tracks*, ARIN newsletter, December 2004
- Gaynor, M., S. Bradner <u>A Real Options Metric to Evaluate Network, Protocol, and Service Architecture</u>, Computer Communication Review (CCR), October 2004
- McKnight, L., J. Howison, and S. Bradner, <u>Wireless Grids: Distributed Resource</u> <u>Sharing by Mobile, Nomadic, and Fixed Devices</u>, IEEE Internet Computing, July-August 2004
- Goodell, G., S. Bradner and M. Roussopoulos, <u>Blossom: A Decentralized</u>
 <u>Approach to Overcoming Systemic Internet Fragmentation</u>, Harvard University
 Computer Science Group Technical Report TR-25-04, 2004
- Kung, H.T., C-M. Cheng, K-S Tan, and S. Bradner, <u>Design and Analysis of an IP-Layer Anonymizing Infrastructure</u>, Proceedings of the third DARPA Information Survivability Conference and Exposition (DISCEX 3), April 2003
- Bradner, S., *Are Global Internet-Related Standards Possible?*, International Journal of IT Standards and Standardization Research, Jan-Mar 2003
- King, K. and S. Bradner, *Internet Emergency Preparedness in the IETF*, Applications and the Internet Workshops, Jan 2003
- Kung, H.T., S. Bradner, and K. S. Tan, <u>An IP-layer Anonymizing Infrastructure</u>, MILCOM 2002, Anaheim, CA, October 2002
- Bradner, S., *Internet Telephony -- Progress Along the Road*, IEEE Internet Computing, May/Jun 2002
- Gaynor, M. and S. Bradner, *The Real Options Approach to Standardization*, Proceedings of Hawaii International Conference on Systems Science, Jan 2001
- Gaynor, M., S. Bradner, M Iansiti, and HT Kung, <u>The Real Options Approach to Standards for Building Network-based Services</u>, Proceeding of IEEE Conference on Standardization and Innovation in Information Technology, Oct 2001



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

