

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

JOHN DOE and AMERICAN CIVIL LIBERTIES
UNION,

Plaintiffs,

v.

JOHN ASHCROFT, in his official capacity as
Attorney General of the United States;
ROBERT MUELLER, in his official capacity
as Director of the Federal Bureau of
Investigation; and MARION E. BOWMAN, in
his official capacity as Senior Counsel to the
Federal Bureau of Investigation,

Defendants.

04 Civ. 2614 (VM)

SEALED

DECLARATION OF SIMSON L. GARFINKEL

I, Simson L. Garfinkel, of Belmont, Massachusetts, declare:

1. I am submitting this Declaration in support of Plaintiffs' Motion for Summary Judgment. I have been asked by counsel for Plaintiffs to address two issues: (1) to describe the types of businesses and organizations that provide electronic communication services; and (2) to describe the different kinds of information that electronic communication service providers typically retain about Internet users.

2. Plaintiffs' counsel has provided me with a copy of 18 U.S.C. § 2709 ("Section 2709"). I have also been provided with two other statutory provisions, 18 U.S.C. § 2711 and 18 U.S.C. § 2510, which define terms used in Section 2709. That is the only material that I have been provided by plaintiffs' counsel. For purposes of this Declaration, plaintiffs' counsel has

advised me to assume that Section 2709 does not require an electronic communication service provider to disclose the content of any electronic communications.

3. Based on my experience and knowledge of electronic communication service providers, I read the terms in Section 2709 to apply to a very broad range of businesses and organizations, and to cover a great deal of information that electronic communication service providers retain about Internet users.

BACKGROUND

4. I am the founder, former Chief Technology Officer, and, presently, the Treasurer of Sandstorm Enterprises, a computer security tools provider based in Malden, Massachusetts. Sandstorm's leading product is NetIntercept, a so-called "network forensics" appliance which captures information moving over an Internet connection and provides a set of sophisticated tools for the analysis of this information. Sandstorm draws its clients from the business, government, and consulting sectors. I have been responsible for, among other things, the development of some of Sandstorm's core technologies, and the integration of those technologies into products that meet customer needs.

5. I am also the founder and former President of Vineyard.NET, an Internet Service Provider (ISP) based on Martha's Vineyard. I started Vineyard.NET in my basement in 1995 and grew it to be the largest ISP on Martha's Vineyard. In 2000, I negotiated the sale of Vineyard.NET to Broadband2 Wireless (BB2W), a venture-funded wireless ISP. I then served as BB2W's Chief Scientist and assisted in the design of the company's Internet architecture and business systems. After BB2W filed for bankruptcy, I negotiated the repurchase of Vineyard.NET. I am still involved with Vineyard.NET on an occasional consultative basis.

6. I also serve as a columnist for CSO (Chief Security Officer) Magazine, where I author the "Machine Shop" column. This column explores the use of technology that assists with security practices. My column recently won the 2003 Neal National Business Journalism

Award for Best Regularly Featured Department or Column. My column routinely discusses issues such as privacy, technology, terrorism, intelligence, wiretapping, encryption, and information hiding.

7. I am the author or co-author of eight books on the topic of information security, including the books, Practical UNIX and Internet Security, 3rd Edition; Web Security, Privacy and Commerce; Database Nation: The Death of Privacy in the 21st Century; and PGP: Pretty Good Privacy. My books, especially Practical UNIX and Internet Security, are widely regarded as leading books in the field of information security.

8. I have been writing about the Internet as a journalist since 1983. I have conducted interviews in operations centers or machine rooms of a broad variety of companies and universities, including Netscape, MCI's MAE-WEST, Akamai, Exodus, BBN, WebTV, Microsoft, Amazon.com, and the Massachusetts Institute of Technology (MIT). Through these experiences, as well as others, I have become familiar with a range of technical operations that these and other companies engage in.

9. I graduated from MIT in June 1987 with three undergraduate degrees in the fields of Chemistry, Political Science, and Computer Science. I subsequently received a Master's degree with honors in Journalism, specializing in science and technology reporting, from Columbia University in June 1988.

10. I am presently enrolled in the PhD program in the Department of Electrical Engineering and Computer Science at the MIT, where my area of research is the intersection of computer security and usability. I was the recipient of an MIT Presidential Fellowship for the study of computer security at the MIT Laboratory for Computer Science.

11. I am the inventor of United States Patent 6,678,270, "Packet interception system including arrangement facilitating authentication of intercepted packets," filed March 12, 1999, and granted on January 13, 2004. This patent relates to the authentication of intercepted

information and related log files, and the establishing of a chain of evidence from the field to the courtroom.

12. I am also the holder of CISSP (Certified Information Systems Security Professional) certificate #4757, a highly-regarded certification in the field of computer security.

13. A copy of my curriculum vitae is attached as Exhibit 1.

OVERVIEW

14. "The Internet" is the common name given to the world-wide collection of interconnected computer networks that communicate using Internet Protocol (IP) addresses. Two of the most common uses of the Internet are the sending and receiving of electronic mail (email) and the downloading of information embodied on "web pages." Other uses of the network include the viewing of pre-recorded or live television segments, the listening to of radio broadcasts, interactive "chats," the carriage of two-way telephone calls, and the playing of multi-user computer games. Use of the Internet has become so widespread that it is now widely believed that a significant portion of the world's long-distance voice and data communications are made in part or entirely over the Internet.

15. Communications over the Internet take place in a variety of forms, including email, discussion groups like Usenet newsgroups, moderated and unmoderated mailing lists, multi-player game spaces, chat systems, and the World Wide Web, along with other file transfer and retrieval mechanisms.

16. Most computers on the Internet are assigned at least one 32-bit number sequence that is their Internet address. These addresses are typically represented as 4 numbers separated by periods. For example, the Internet address 18.7.21.69 is one of three addresses that are used by the MIT web server.

17. The Internet itself is essentially a "network of networks." These individual networks are mostly located within businesses, universities and other organizations. Internet

technologies connect these individual networks to each other, forming one seamless network. This seamless network is the Internet.

18. To be sent over the Internet, all information must first be broken down into small "packets" of information. Each of these packets consists of a header and a data payload. The header includes the originating IP address, the destination IP address, a number that defines the IP protocol in use, and additional information that is used to interpret the data payload. The data payload, in turn, consists of the information being sent. Studies conducted by Sandstorm Enterprises and others indicate that these packets tend to average 500 bytes in size; the maximum packet size that can be transmitted over Ethernet without fragmentation is 1500 bytes.

19. In order to engage in the different forms of communication on the Internet, an Internet user must use the services of one or more electronic communication service providers. First, to connect to the Internet, a user must have a connection from his or her computer or network to an electronic communications service provider. Second, the information sent over the Internet by a user is typically sent from the user's computer to a second computer or network operated by an electronic communication service provider. The user's computer may be a desktop computer, such as a PC running the Windows operating system, a handheld computer such as a Personal Digital Assistant (PDA), or even a cellular telephone equipped with a web browser. The computer operated by the electronic communication service provider, in turn, may be a web server, a mail server, a chat server, or some other kind of server.

20. A unique aspect of the Internet, and the communications made over the Internet, is that it is common for many Internet users to communicate on the Internet anonymously, utilizing pseudonyms rather than their true identities, much like the old system of truck drivers using "handles" when speaking on their CBs. Those who choose to use these pseudonyms do so for a number of reasons, including the fact that this anonymity encourages the

uninhibited exchange of ideas and opinions that the users might not otherwise feel comfortable discussing.

ELECTRONIC COMMUNICATION SERVICE PROVIDERS

21. 18 U.S.C. § 2510(15) defines an "electronic communication service" as: "any service which provides to users thereof the ability to send or receive wire or electronic communications." "Electronic communications" are, in turn, defined by Section 2510(12) as: "any transfer of signs, signals, writing, images, sounds, data, or intelligence of any nature transmitted in whole or in part by a wire, radio, electromagnetic, photoelectronic or photooptical system that affects interstate or foreign commerce, but does not include -- (A) any wire or oral communication; (B) any communication made through a tone-only paging device; (C) any communication from a tracking device . . . ; or (D) electronic funds transfer information stored by a financial institution in a communications system used for the electronic storage and transfer of funds." Section 2510(1) defines a "wire communication" as: "any aural transfer made in whole or in part through the use of facilities for the transmission of communications by the aid of wire, cable, or other like connection between the point of origin and the point of reception (including the use of such connection in a switching station) furnished or operated by any person engaged in providing or operating such facilities for the transmission of interstate or foreign communications or communications affecting interstate or foreign commerce."

22. Based on the extremely broad definition of electronic communications service in Section 2510, it is my belief and understanding that the term electronic communication service provider in Section 2709 applies to a very wide range of businesses and organizations. Section 2709 clearly covers Internet Service Providers such as Vineyard.NET and America Online -- organizations that connect individuals and businesses to the Internet for a fee. But there are many, many other kinds of organizations and even individuals that provide electronic communications services that would appear to be covered by the terms of the statute as well.

23. Any business or organization, including any advocacy organization, which has a web site that enables users to send messages through the web site, would appear to be covered by the terms of the statute. For example, the American Arab Anti-Discrimination Committee is likely a communication service provider because its web site enables Internet users to compose and send emails to elected officials to support or oppose legislation important to the organization. The ACLU, as another example, is also likely an electronic communication service provider because, in addition to enabling Internet users to send emails to officials, its web site contains online complaint/intake forms for individuals to fill out and transmit to the ACLU on issues that it is working on, such as the organization's challenge to the federal government's "No Fly List." So, too, are organizations like the National Rifle Association, whose web site provides the ability to, among other things, send a letter to the media on issues of interest to the Internet user and the NRA, and Moveon.org, which enables its viewers to sign and send petitions to Congress.

24. Indeed, any organization or business that provides Internet connectivity to its employees, to enable employees to send and receive messages while at work, is also likely to be a service provider under the terms of the statute. That category applies to most businesses and organizations in the United States.

25. Schools, colleges, and universities are also electronic communication service providers because they both operate web sites and operate computer networks that enable network users to send and receive information over the Internet. MIT, for example, which provides its students with access to the Internet, seems to fall squarely within the terms of the statute.

26. Search engines and directories, such as Google and Yahoo, are also clearly electronic communication service providers under the terms of Section 2709. To use a search engine, an Internet user types in a request and then sends it, over the Internet, to the search

engine, which then performs the requested search and sends the results back to be received by the user.

27. All web sites, such as Amazon.com, that enable users to send emails and information requests directly through the site itself, as well as to complete transactions, are also electronic communication service providers. Indeed, any web site, like Amazon or like Citysearch.com, that allows Internet users to rate and review merchandise or restaurants – in other words, to send information over the Internet – would likely be an electronic communication service provider under Section 2709.

28. Another example are digital or numeric paging services, such as Arch Wireless, that operate a paging network that enables individuals to send and receive text-based or numeric pages. Those services are also communication service providers under the terms of the statute.

29. Even a Starbuck's coffee shop that has a "Wi-Fi" Wireless Access Point for use by its customers could be considered to be an electronic communication service provider. A customer could, for example, use the Wi-Fi network, which enables customers to access the Internet, to purchase a book over the Internet from a web site while he or she is sitting in the coffee shop.

30. Indeed, as the foregoing examples illustrate, practically any web site or online service that allows user-generated content has the ability to be classified as an electronic communication service under the terms of Section 2709.

INFORMATION RETAINED BY SERVICE PROVIDERS

31. Section 2709 states that a service provider shall comply with a request for "subscriber information and toll billing records information" and "electronic communication transactional records." Neither Section 2709 nor 18 U.S.C. § 2510 or 18 U.S.C. § 2711 appear to contain a definition of these terms. Although Section 2709 does not specify exactly what

information it covers, based on my experience and knowledge of electronic communication service providers, I read these terms to encompass a wide range of different types of information that are retained by service providers about Internet users, including Internet users' email addresses (and any descriptive information contained in the address, such as the organization the address is associated with), who they are sending and receiving email from, which web sites or web pages they are visiting, and the subject matter of their communications (as reflected in the "Subject:" line in headers).

32. Within the context of a traditional Internet Service Provider, specific information that would be covered by these terms includes a subscriber's name, address, telephone number, account name, primary email address, a secondary email address, date of service start, class of service, service interruptions, and any notes that might be attached to the subscriber's file. ISPs also maintain a broad range of information that is used for either billing or system maintenance, which would also presumably be covered by the terms of the statute. Many ISPs also maintain credit and payment information on their customers.

33. Electronic communication service providers also maintain "log" files in conjunction with email services to keep track of every email message that is sent or received through the provider's email servers. Such logs can include the "To:," "From:," and "Subject:" lines of every message. This information, while not disclosing the content of the communications, can be very detailed. Indeed, unlike a telephone number, which is just a series of numbers, the information contained in these log files can include, among other things, the name of the organization associated with the sender or recipient's email address, the subject matter of the emails, the name of the web site, chat group or list-serve to which the message is being posted, and any descriptive message that the user puts into his or her email name (for example, Redsoxhater@ex.com). Electronic communication service providers can also use network monitoring systems such as Sandstorm's NetIntercept to create log files for email

messages that merely pass through their networks, but are not actually sent or received through the provider's email servers.

34. Electronic communication service providers also have the ability to monitor and to keep information regarding web transactions by Internet users. Such monitoring can be performed by routing all of a user's traffic through a web proxy, or by monitoring communications using a network monitoring system. These transaction logs can be exceedingly detailed, including the name of every web page accessed, information about the page's content, the names of accounts accessed, and even username/password combinations of web services.

35. Electronic communication service providers also have the ability to keep Internet "NetFlow" data. An Internet "NetFlow" is a set of packets that travel between two points – for example, between a person's desktop computer and Amazon's website. Modern routers, such as those manufactured by Cisco Systems, can be set to automatically record a list of all the NetFlows that they see, or all NetFlows to or from a specific IP address. This NetFlow information, which can be captured at many points throughout the Internet, essentially provides a complete history of each electronic communication service used by an Internet user.

36. As another example, web servers maintain logs of every request that they receive and every web page that is served. This might include a complete list of all web pages seen by an individual, all terms searched for, names of email accounts, passwords, purchases made, names of other individuals subject to communication, and so forth. Most web servers also record the speed at which the data is downloaded. This information would appear to be covered by the terms of Section 2709 as well.


37. Content Delivery Networks (CDNs), such as Akamai, are high-availability networks that are used by popular websites to speed delivery of their information to Internet users. An Internet user on CNN and Apple's web sites, for example, uses Akamai's services to download images and other rich content from these web sites. Akamai stores in its network a

record for every image, web page, video clip, or other "object" that is downloaded by every user of one of their client websites. Thus, CDNs can provide a single record of a user's web browsing habits without involving that individual's ISP.

38. The foregoing list is by no means comprehensive and provides only a survey of some of the many types and kinds of information that may be sought as "electronic communication transactional records" under Section 2709.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on this 13 day of May 2004.



Simson L. Garfinkel

Garfinkel
Declaration
Exhibit 1



Simson L. Garfinkel

Residence: Belmont, Mass.

simsong@ex.com

+1 617-876-6111

Technologist, author, and recognized expert in the field of computer security.

Current Affiliations

- MIT Computer Science and Artificial Intelligence Laboratory, Graduate Student.
 - Sandstorm Enterprises, Inc., Treasurer and Board member.
 - Intellivid, Inc., Member, Advisory Board
 - Liberty Science Center, Member, Advisory Board, Communication Exhibition
-

Books

- Practical UNIX and Internet Security, 3rd Edition, co-authored with Gene Spafford and Alan Schwartz. 2003. (O'Reilly & Associates, Inc.)
 - Building Cocoa Applications, with Michael K. Mahoney. 2002. (O'Reilly & Associates, Inc.)
 - Web Security, Privacy and Commerce, with Gene Spafford. 2001. (O'Reilly & Associates, Inc.)
 - Database Nation: The Death of Privacy in the 21st Century, 2000. (O'Reilly & Associates, Inc.)
 - Architects of the Information Society, Edited by Hal Abelson. 1999 (MIT Press.)
 - Stopping Spam, co-authored with Alan Schwartz. 1998. (O'Reilly & Associates, Inc.)
 - Web Security and Commerce, with Gene Spafford. 1997. (O'Reilly & Associates, Inc.)
 - Practical UNIX and Internet Security, co-authored with Gene Spafford 1996. (O'Reilly & Associates, Inc.)
 - PGP: Pretty Good Privacy. 1995. (O'Reilly & Associates, Inc.)
 - The UNIX-HATERS Handbook, editor, with Daniel Weise and Steven Strassmann. 1994 (IDG Press)
 - NeXISTEP Programming, with Michael Mahoney. 1992 (Springer-Verlag)
 - Practical UNIX Security, with Gene Spafford. 1991 (O'Reilly & Associates, Inc.)
-

Academic Publications

Garfinkel, S. Email-Based Identification and Authentication: An Alternative to PKI?, *IEEE Security and Privacy*, November/December 2003.

Garfinkel, S. Enabling Email Confidentiality through the use of Opportunistic Encryption, presented at the 2003 National Conference on Digital Government Research, May 2003, Boston, MA.

Garfinkel, S. Leaderless Resistance Today, *First Monday*, 8:3, March 3rd, 2003.

Garfinkel, S., A Web Service for File Fingerprints: The Goods, the Bads, and the Unknowns, final paper for MIT 15.972, January 2003.

Garfinkel, S. and Shelat, A., "Remembrance of Data Passed: A Study of Disk Sanitization Practices," *IEEE Security and Privacy*, January/February 2003.

Garfinkel, S., Robertson, H., Elledge, C., Levine, J., Synframe: a Multi-Peer Synchronization Framework, final paper for MIT 6.824, December 2002.

Garfinkel, S. "Adopting Fair Information Practices to Low Cost RFID Systems", paper presented at Privacy in Ubicomp'2002 workshop, Gotenborg, Sweden, September 29th, 2002.

Stallman, R., and Garfinkel, S. "Against Software Patents", *Communications of the ACM*, Volume 35, Issue 1 (January 1992), pages 17-22, 121

Stallman, R., and Garfinkel, S. "Against User Interface Copyright", *Communications of the ACM*, Volume 33, Issue 11 (November 1990), pages 15-18.

Garfinkel, S. "Tenant Screening Services in the United States", submitted in partial completion of the degree of Master's of Science in Journalism, supervised by professor Steven Ross, Columbia University, 1988.

Garfinkel, S. "The Story of the Write Once File System." Brown University, August 1st, 1987 (DRAFT)

Garfinkel, S. and Love, S., "A File System for Write-Once Media." MIT Media Laboratory, October 1985.

Positions Held

Sandstorm Enterprises, Inc. March 1998 ---

Founder (1998), CTO (1998-2001), Treasurer (2000-)

Conceived and organized Sandstorm Enterprises, a software development firm specializing in offensive information warfare technology. Negotiated startup funding from International Network Services. Lead developer of PhoneSweep, the world's first commercial telephone scanner (key technologies: multi-threaded telecommunications based on MySQL database; expert system for identification of remote systems; multi-threaded PPP implementation). Authored Sandstorm's cryptographic toolkit and anti-circumvention technology.

RFID Privacy Workshop, August 2003 -- November 2003

Chair

Conceived and organized a conference on RFID privacy issues which took place at MIT on November 15, 2003. Arranged funding, solicited papers and presentations, served on the Program Committee, coordinated media coverage, and hosted event. Over 200 people, with speakers from across the globe, attended. Articles based on the workshop appeared in Wired News, ZD Net, and other prominent publications.

Broadband2Wireless, Inc., May 2000 --- July 2001

Network Architect, Chief Scientist, and Advisory Board Member

Technical lead for startup nation-wide wireless ISP. Responsibilities included network design, implementation, automation, creation of proprietary technology and algorithms, hiring, and supervision of technical staff. Broadband2Wireless declared Chapter 7 Bankruptcy in July 2001 due to the inability to raise additional funding.

Vineyard.NET, Inc. July 1995 ---

Founder

Conceived and organized the first company to offer Internet service from Martha's Vineyard. Designed and implemented web-based accounting and customer management system with MySQL and perl. Grew company with \$15,000 in funding to 1400 customers and annual sales of \$450,000. Negotiated sale of company to Broadband2Wireless, Inc.. Repurchased Vineyard.NET from BB2W's bankruptcy trustee.

Simson Garfinkel & Associates, Inc. May 1992 --- February 1993

Conceived and organized company to develop and market SBook, an AI-based address book application for NeXTSTEP-based computers. Lead developer. Supervised two employees. Negotiated sale of company to Sarrus Software, Inc.

NeXT Computer, Inc. May 1990, August 1991

Sole developer of NeXT's CDROM subsystem (ISO 9660 with Rock Ridge extensions) used in NeXTSTEP 3.0 and 4.0.

Polaroid, Inc. January 1987 --- September 1990

Designed and implemented a physician's medical imaging workstation. Novel technology included a write-once file system, custom-built window system, and DSP image processing code. Demonstrated workstation at trade shows and deployed within Polaroid for supporting research.

March 1988 --- June 1991

N/Hance Systems, Dedham, MA

Chief Scientist for the company that commercialized the Write Once File System I developed at the Media Lab.

June 1987 --- August 1987

System programmer, IRIS Project, Brown University

Designed and implemented a CDROM File system NFS Server.

MIT Media Laboratory February 1985 --- June 1987

Developed and implemented a file system for CDROMs and write-once optical discs.

June 1984, 1985, 1987

Laboratory coordinator, MIT

Teacher's assistant for a summer course on biomolecular modeling.

June 1986 --- August 1986

Researcher, Weizmann Institute of Science, Israel

Designed and implemented a multitasking laboratory data acquisition system.

September 1981 --- June 1982

Undergraduate Researcher, Bryn Mawr College

Designed and implemented graphics libraries in APL and FORTRAN.

Journalistic Experience

Current:

CSO Magazine, Columnist, "Machine Shop," (2002--
Technology Review Magazine, Columnist, "Putting Technology to Work for You," (1998---)
TechnologyReview.com Website, Review Columnist, "Gadget Master," (2002---)
WIRED Magazine, Contributing Writer, (1993---)

Past:

The Boston Globe, Computer Columnist, (August 1996--April 2000)
HotWired, Technology Columnist, (1996---1997)
Internet Underground, Editor At Large, (1996)
SunExpert Magazine, Senior Editor, (1994---1996)
NeXTWORLD Magazine, Senior Editor, (1991---1994)
The Christian Science Monitor, Science & Technology staff writer, (1989---1990)
The Jerusalem Post, Contributing Writer, (Summer 1986)

My articles have appeared in many publications, including:

Advanced Systems; Boston Globe; CD-ROM Review; Christian Science Monitor; Computer Update; Computers and Learning; Computerworld; Dr. Dobbs' Journal; Forbes; Internal Medicine World Report; IRB; Issues in Science and Technology; OMNI; New Age Journal; New York Times; NeXTWORLD; Jerusalem Post; Personal Workstation; Privacy Journal; Practical Lawyer; RS/Magazine; Sacramento Bee; Salon; San Jose Mercury News; Seattle Times; Shelterforce; Sun Expert; Technology Review; USA Today; Wellesley; Whole Earth Review; WIRED; Worth.

An online archive of my publications is located at <http://simson.net/clips>.

Patents

United States Patent 6,678,270 (Granted January 13, 2004), Garfinkel, Packet interception system including arrangement facilitating authentication of intercepted packets. Filed March 12, 1999.

United States Patent 6,490,349 (Granted December 3, 2002), Garfinkel et al., System and Method for Scan-Dialing Telephone Numbers and Classifying Equipment Connected to Telephone Lines Associated therewith. Filed December 19, 1998.

Awards, Certifications, and Honors

2004 Jesse H. Neal National Business Journalism Award, for Best Regularly Featured Department or Column, awarded to CSO Magazine's "Machine Shop" column, by Simson Garfinkel (edited by Elaine Cummings, designed by Chandra Tallman with Steve Traynor).
[front] [back]

2004 Jesse H. Neal National Business Journalism Award, Grand Neal Runner-up, 2nd place, CSO Magazine, "Machine Shop."

2003 Best Regular Column, Contributed (Silver) (East Coast Region, Under 80,000 circulation), awarded by the American Society of Business Publication Editors, for the "Machine Shop" series in CSO Magazine.

2002-2003 MIT Presidential Fellowship, for study in the field of Computer Science at the Massachusetts Institute of Technology Laboratory for Computer Science.

2000 Best COMPUTERS IN SOCIETY book, Third Annual BookBytes Awards, awarded for *Database Nation: The Death of Privacy in the 21st Century*.

1999 Best Feature Series (West Coast Region, Circulation over 80,000), awarded by the awarded by the American Society of Business Publication Editors, for the "Privacy in the Internet Age" feature series appearing in PC World Magazine.

1998-current CISSP Certified Information Systems Security Professional (#4757).

1997 Award of Merit for Practical UNIX and Internet Security, International Technical Publications Competition, awarded by the Society for Technical Communication.

1996 Award of Distinguished Technical Communication (highest award) for Practical UNIX and Internet Security, STC Boston/NNE Technical Publications Competition, awarded by the Society for Technical Communication.

1994 Object Honors for best Training & Education product, awarded by SHL System House Ltd. for the book NeXTSTEP Programming .

1991 Award of Merit for Practical UNIX Security, awarded by Society for Technical Communication, Boston and Northern New England Chapters, in the 1990-1991 Competition for Technical Publications.

1990 Award of Merit for review article on Write Once File Systems, 1990 Society for Technical Communication, Boston and Northern New England Chapters, for 1989-1990 Competition for Technical Publications.

1988 Elisabbeta DiCagno Award. "For the best investigative story on environmental protection or human rights." awarded by the Faculty of Journalism of Columbia University for masters' project on tenant screening databases.

1987 Mark of Excellence Contest, first place, Newspaper Column Writing, Society of Professional Journalists Sigma Delta Chi, Region One.

1987 Mark of Excellence Contest, second place, Non-Fiction Magazine Article, Society of Professional Journalists Sigma Delta Chi, Region One.

Professional Societies

Institute of Electrical and Electronic Engineers, Member.

Association of Computing Machinery, Member.

Sigma XI, The Scientific Research Society, Member.

Education

Massachusetts Institute of Technology, 2002--

Currently enrolled as a graduate student in computer science.

Columbia School of Journalism, 1988

Masters' degree with honors in Journalism, specializing in science and technology writing.

Massachusetts Institute of Technology, 1987

Bachelor of Science in Chemistry

Bachelor of Science in Political Science

Bachelor of Science in Science, Technology and Society.

Bryn Mawr College, 1981 -- 1983

Special student studying chemistry and computer science.

The Shipley School, 1983

High school diploma, graduating first in class

This document is located on the Internet at <http://www.simson.net/cv/>.

Last updated May 12, 2004.