

Advisory Committee on Online Access and Security--Nomination, P004807

Nomination of Daniel E. Geer, Jr.

Current Position: Chief Technologist of SystemExperts Corporation

Criterion 1: The individual's participation would promote a balance of points of view represented and functions to be performed by the Advisory Committee.

Dr. Geer is on the board of advisors to several commercial web-based firms. He represents the technical capability of the system architecture employed by commercial web-based enterprises. He argues that this issue revolves around risk management, that accountability done well ultimately requires less permission control. As one of the founding scientists of network security measures, and CTO of a network security firm, he understands both the issues and the technologies relevant to implementing fair information practices. He is uniquely positioned to advise the Committee members on technical issues: what measures are possible and feasible.

Criterion 2: The individual has expertise in or knowledge of the issues that are the focus of the Advisory Committee's work.

For over a decade, Dr. Geer has published and lectured on the issues involved in computer and network security (see summary of publications below – full CV follows). He has organized and led testimony before Congress by a panel of experts on public policy in an age of electronic commerce, and the role of Congress in computer security (House Science Committee, Subcommittee on Technology, November 1996 and February 1997). He holds a BS in Electrical Engineering and Computer Science from MIT, and an SC.D. from Harvard University in biostatistics. His broad base of experience and technical understanding allow him to see the nexus between technological capability and privacy concerns.

Summary of Publications

Geer DE : *Open Network Authentication and Authorization*, on-site tutorial, National Security Agency, Fort Meade, Maryland, June, 1989.

Geer DE & Rochlis JA : *The Kerberos Approach to Network Security*, Tutorial, SANS, Orlando, Florida, October 28, 1998.

Geer DE : *The Risk Equation in Electronic Commerce*, Inaugural Conference on Electronic Government, Tallahassee, Fla., January 26, 1999.

Geer DE : *Privacy in the Real World*, Smart Card Forum, Washington, D.C., May 20, 1999.

Geer DE : *Security as Enabler for Electronic Commerce*, Guest Lecture, Boston College, School of Law, Boston, Massachusetts, November 1, 1999.

Geer DE & Rochlis JA : *Modern Security Protocols, Tutorial*, LISA-13, USENIX Association/SAGE combined, Seattle, Washington, November 7, 1999.

Geer DE : *Privacy: It's not the Odds, It's the Stakes*, Consumer Federation of America, Washington, D.C., December 3, 1999.

Criterion 3: The individual adequately reflects the views of the relevant affected interest(s).

Dr. Geer has been an officer or member of the board of USENIX Association since 1985, and was the USENIX Vice President from 1996 to 1998. Because of his prolific speaking and publishing on internet security issues, he has been nominated by the membership of USENIX to become its president (to be made public January 17). He has addressed privacy and security issues before various business and scientific associations, and is a member of several professional associations concerned with internet security. Please see his CV for more information.

Biographical Summary

Daniel E. Geer, Jr., Sc.D., Chief Technologist

Dan Geer is Chief Technologist of SystemExperts Corporation. Prior to joining SystemExperts, Dan was Vice President and Senior Strategist of CertCo, LLC, one of the market leaders in digital certification for electronic commerce. Dan was previously Director of Engineering at Open Market and has been a successful entrepreneur in network security and systems management. His company, Geer-Zolot Associates, which provided security consulting services to the financial industry, was acquired by OpenVision Technologies (now Veritas) in 1993. At OpenVision, Dan played many roles including Chief Scientist, VP of Technology, and Managing Director of OpenVision's security consulting business. Prior to Geer Zolot Associates, Dan was Technical Director, Innovation Technology Resource Center for Digital Equipment Corporation, and was for a number of years the Manager of Systems Development for MIT's Project Athena. At Athena he was responsible for all technical development, including X, Kerberos, and all other aspect

A frequent speaker, popular teacher and member of several professional societies, Dan is active in USENIX where he has served as a member of the Board of Directors since 1994. He was the Conference Chair for the First Symposium on Mobile and Location Independent Computing and the First USENIX Workshop on Electronic Commerce. Dan arranged the Public Key Infrastructure track of the Third USENIX Workshop on Electronic Commerce, held in Boston in August of 1998 and he co-chaired the 1999 workshops on Embedded Systems and on Intrusion Detection.

Dan holds a Bachelor of Science degree in Electrical Engineering and Computer Science from MIT and a SC.D. in biostatistics from Harvard University. He is the author of The Web Security Sourcebook (Wiley & Sons 1997) and he wrote the security chapter in Leebaert's The Future of the Electronic Marketplace (MIT Press 1998).

C U R R I C U L U M V I T A E

Daniel Earl Geer, Jr.

Born 4 July 50, Chattanooga, Tennessee

1968-1972

S.B., Electrical Engineering & Computer Science, Massachusetts Institute of Technology, Cambridge, Massachusetts. Thesis title: Computer Aided Diagnosis of Febrile Exanthems.

1972-1981

Senior Medical Research Programmer/Analyst, Computer Medicine Laboratory, Beth Israel Hospital, Boston, Massachusetts.

1981-1982

Lead Programmer/Analyst & Research Coordinator, Harvard Community Health Plan, Boston, Massachusetts.

1982-1985

Manager of Systems, Health Sciences Computing Facility, Harvard School of Public Health, Boston, Massachusetts.

1985-1990

Manager of Systems Development, Project Athena, Massachusetts Institute of Technology, Cambridge, Massachusetts.

1979-1988

Sc.D., Biostatistics Harvard University, School of Public Health, Cambridge, Massachusetts. Dissertation title: A Knowledge Based System for Epidemiologic Assessment.

1990-1991

Technical Director, Innovation Technology Resource Center, External Research Program, Digital Equipment Corporation, Cambridge, Massachusetts.

1991-1993

Founder and President, Geer Zolot & Associates, Cambridge, Massachusetts.

1993-1994

General Manager, Security Business Unit, OpenVision Technologies, Cambridge, Massachusetts

1994-1995

Chief Scientist and Vice President, OpenVision Technologies, Cambridge, Massachusetts

1995-1997

Director of Engineering, Open Market, Inc., Cambridge, Massachusetts

1997-1999

Vice President and Senior Strategist, CertCo, LLC, New York,

N.Y. and Cambridge, Massachusetts

1999

Chief Technologist, SystemExperts Corp, Boston, Massachusetts

2000-present

Chief Technology Officer, At Stake, Inc., Cambridge, Massachusetts

M E M B E R S H I P S

1975 Association for Computing Machinery
1978 Massachusetts Public Health Association
1980 American Public Health Association
1980 American Association for Artificial Intelligence
1981 Biometrics Society
1981 Society for Industrial & Applied Mathematics
1981 American Statistical Association
1983 Society for Medical Decision Making
1985 USENIX Association
Tutorial Instructor continuously since 6/88
Session Chair 2/88, 2/90, 6/91, 1/92
Program Committee 2/90, 6/91
Panel Organizer 6/91, 1/92
Tutorial Review Committee 6/91-present
University Relations Chair 1990-1993
Technical Program Chair, Main Conference, 1/93
Chair, Symposium on Mobile and Location Independent Computing, 8/93
Petition Board Candidate 2/90, 2/92
Book Series Editor, 10/93-1/95
Board Candidate by Nominating Committee, 2/94
Board Member 6/94-
Chair, First Workshop on Electronic Commerce, 7/95
Vice President Candidate by Nominating Committee,
2/96
Vice President 6/96-6/98
Program Committee & Board Liaison, Security
Conference, 7/96
Program Committee & Board Liaison, Second Workshop on
Electronic Commerce, 11/96
Program Committee, Security Conference, 1/98
Treasurer 6/98-
PKI Track Organizer, 3rd Workshop on Electronic
Commerce,
8/98
Co-Chair & Board Liaison, 1st Workshop on Embedded
Systems, 3/99
Program Committee & Board Liaison, 1st Intrusion
Detection
Workshop, 4/99
Program Committee & Board Liaison, Security
Conference, 8/99
1988 Society for Artificial Intelligence and Statistics
1992 Systems Administrators Guild (SAGE)
1992 Internet Society
1992 UniForum

1994 American Medical Informatics Association
1997 Digital Commerce Society of Boston

P U B L I C A T I O N S

- (1) Hadley TP, Geer DE, Bleich HL & Freedberg IM : The use of digital computers in dermatologic diagnosis: computer-aided diagnosis of febrile illness with eruption. *Journal of Investigative Dermatology* 62:467-471, 1974.
- (2) Reich PR, Geer DE & Bleich HL : A computer program for the diagnosis of hematologic disorders. *American Journal of Hematology* 3:127-135, 1977.
- (3) Melski JW, Geer DE & Bleich HL : Medical information storage and retrieval using preprocessed variables. *Computers and Biomedical Research* 11:613-621, 1978.
- (4) Stern RS, Morison WL, Thibodeau LA, Kleinerman RA, Parrish JA, Geer DE & Fitzpatrick TB : Antinuclear antibodies and oral methoxsalen photochemotherapy (PUVA) for psoriasis. *Archives of Dermatology* 115:1320-1324, 1979.
- (5) Gardner GH, Perry JH & Geer DE : Capabilities of MISAR for medical research *Proceedings, MUMPS User's Group*, 1979.
- (6) Obler LK, Albert ML, Caplan LR, Mohr JP & Geer DE : Aphasia type, sex differences, and aging. *Proceedings, Academy of Aphasia*, 1980.
- (7) Finley J, Barsky S, Geer, D, Kamat B, Noe J & Rosen S : Healing of port wine stains after argon laser therapy. *Proceedings, International Academy of Pathology, New Orleans, Louisiana, February, 1980.*
- (8) Barsky SH, Rosen S, Geer DE & Noe JM : The nature and evolution of port wine stains: a computer-assisted study. *Journal of Investigative Dermatology* 74:154-157, 1980.
- (9) Noe JM, Barsky SH, Geer DE & Rosen S : Port wine stains and the response to argon laser therapy: successful treatment and the predictive role of color, age, and biopsy. *Plastic & Reconstructive Surgery* 65:130-136, 1980.
- (10) Melski JW, Caplan LR, Mohr JP, Geer DE & Bleich HL : Analysis of a clinical process when allocation of patients is biased: diagnosis of stroke at two hospitals. (Submitted to *Annals of Internal Medicine*, and in revision.)
- (11) Melski JW, Stern RS, & Geer DE: The long-term rate of treatment for psoriasis with PUVA. (In preparation.)
- (12) Bana DS, Leviton A, Slack WV, Geer DE & Graham JR : Use of a computerized data base in a headache clinic. *Headache* 21:72-74, 1981.

- (13) Heller GV, Blaustein AS, Wei JY & Geer DE : Implications of increased myocardial isoenzyme level in the presence of normal serum creatine kinase activity. *American Journal of Cardiology*, 51:24-27, 1983.
- (14) Read JL, Stern RS, Thibodeau LA, Geer DE & Klapholz H : Variation in antenatal testing over time and between clinic settings. *Journal of the American Medical Association*, 249:1605-1609, 1983.
- (15) Geer DE : Knowledge based support for epidemiologic assessment. *Coupling Symbolic and Numerical Computing in Expert Systems*, Kowalik JS & Kitzmiller CT ed., 1987.
- (16) Rosenstein MA & Geer DE : The Athena Service Management System. *Proceedings, USENIX Association, Winter, 1988*.
- (17) Steiner JG & Geer DE : Network services in the Athena environment. *Proceedings, European Unix Users' Group, 1988*.
- (18) Coppeto TJ, Anderson B & Geer DE : OLC: an on-line consulting system for UNIX. *Proceedings, USENIX Association, Summer, 1989*.
- (19) Coppeto TJ, Anderson B & Geer DE : OLC: an on-line consulting system. *Proceedings, ACM SIG UCCS, October, 1989*.
- (20) Geer DE, Rochlis JA, & Schiller JI : Network Security - The Kerberos Approach. *1990 Internetworking Tutorials, Advanced Computing Environments, January, 1990*.
- (21) Geer DE : Athena: Toward the Optimal Computing Architecture. *Spectrum, Arthur D. Little, September, 1990*.
- (22) Champine GA, Geer DE & Ruh WN : Project Athena as a Distributed Computer System. *IEEE Computer, 23:9:40-51, September, 1990*.
- (23) Geer DE & Champine GA : Distributed Computing for the Technical Workplace. *Proceedings, European Unix Users Group, October, 1990*.
- (24) Geer DE : Athena: Toward the Optimal Computing Architecture. *Futurescope, Arthur D. Little, May, 1991*.
- (25) Geer DE : Decentralization without Anarchy. *Spectrum, Arthur D. Little*.
- (26) Geer DE : Lessons Learned from Project Athena. *Distributed Computing: Implementation and Management Strategies*, Khanna R ed., Prentice Hall, 518 pp., 1993.
- (27) Davis DT & Geer DE : Kerberos Security With Clocks Adrift. *USENIX Association 5th UNIX Security Symposium, Salt Lake City, Utah, June, 1995*.
- (28) Geer DE : Electronic Commerce, Banking and You. *Computer Security Journal, XI:2:55-62, Fall, 1995*.
- (29) Davis DT, Geer DE & T'so T : Kerberos Security With Clocks

Adrift: History, Protocols, and Implementation. 9:1:29-46, Winter, 1996.

- (30) Geer DE & Davis DT : Token-Mediated Certification and Electronic Commerce. USENIX Association 2nd Workshop on Electronic Commerce, Oakland, California, November 19, 1996.
- (31) Rubin A, Geer DE & Ranum MJ : Web Security Sourcebook, John Wiley & Sons, New York, New York, 368 pp., July 1997.
- (32) Geer DE : Driving the Future, Why the Financial Community Rules, ;login: Special Issue on Security, USENIX Association, Berkeley, California, May 1998.
- (33) Geer DE : Unseen Guardians, Invisible Treasures. The Future of the Electronic Marketplace, Derek Leebaert ed., MIT Press, 383 pp., September, 1998.
- (34) Rubin AD & Geer DE : A Survey of Web Security, IEEE Computer, 31:9:34-41, September 1998.
- (35) Rubin AD & Geer DE : Mobile Code Security, IEEE Internet Computing, 2:6:30-34, November/December 1998.
- (36) Rubin AD & Geer DE : Safe CGI Scripting, Software Development, 7:1:S1-S4, January 1999.

A B S T R A C T S

- (A1) Read JL, Stern RS, Geer DE, Thibodeau LA & Klapholz H : Physician test ordering in obstetrics: ultrasound, fetal stress testing, urinary estriols. Proceedings, American Federation for Clinical Research, & American Society for Clinical Investigation, March, 1981.
- (A2) Geer DE : Authentication for Untrusted Networks of Untrusted Hosts. .login; 12 :5:28, 1987.

I N V I T E D P R E S E N T A T I O N S

- (P1) Geer DE : Introduction on Telecommunications. Harvard Community Health Plan, Staff in-service training series, Boston, Massachusetts, 1981.
- (P2) Geer DE & Pagano M : Hardware & Software Considerations in Design of Personal Computer Support for the Public Health Professional. By invitation of the Statistics Section, American Public Health Association, Dallas, Texas, November, 1983.
- (P3) Geer DE : Statistics + Artificial Intelligence = ?. Bio-statistics Symposia Series, Harvard University, School of

Public Health, October, 1984.

- (P4) Geer DE : Authentication in a Network Services Environment. Work-In-Progress session, USENIX Association, Phoenix, Arizona, August, 1987.
- (P5) Geer DE & Athena staff : Panel Chair, The Athena Network Service Environment. USENIX Association, Dallas, Texas, February, 1988.
- (P6) Geer DE : Session Chair and Member of the Program Committee. USENIX Association, Dallas, Texas, February, 1988.
- (P7) Geer DE & Athena staff : Large Scale Workstation Environments, USENIX Association, Dallas, Texas, February, 1988.
- (P8) Geer DE & Treese GW : Large Scale Workstation Environments, USENIX Association, San Francisco, California, June, 1988.
- (P9) Geer DE : The Kerberos Authentication System. Workshop on a Nationwide File System, Carnegie-Mellon University, Pittsburgh, Pennsylvania, August, 1988.
- (P10) Geer DE : Requirements for Large Scale Fileservice. Workshop on a Nationwide File System, Carnegie-Mellon University, Pittsburgh, Pennsylvania, August, 1988.
- (P11) Geer DE : Distributed Computing Environments for the Scientific Workplace. By invitation of the Biostatistics and Epidemiology Section, Dana-Farber Cancer Institute, Boston, Massachusetts, December, 1988.
- (P12) Geer DE : Knowledge-Based Assessment in Chronic Disease Epidemiology. Second International Workshop on Artificial Intelligence and Statistics, Fort Lauderdale, Florida, January, 1989.
- (P13) Geer DE, Steiner JG & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial M11, USENIX Association, San Diego, California, January, 1989.
- (P14) Rosenstein MA & Geer DE : Distributed Systems Management, USENIX Association, San Diego, California, February, 1989.
- (P15) Geer DE : Distributed Computing Environments for the Scientific Workplace, 21st Interface, Orlando, Florida, April, 1989.
- (P16) Geer DE : Distributed Computing in the Athena Environment, MIT Industrial Liaison Program - Financial Services Seminar Series, Salomon Brothers, New York, New York, April, 1989.
- (P17) Geer DE : Network Communications Security in Open Networks, SecureWare Workshop, Atlanta, Georgia, May, 1989.
- (P18) Geer DE, Rochlis JA & Schiller JI : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial T4, USENIX Association, Baltimore, Maryland, June, 1989.

- (P19) Geer DE, Rochlis JA & Schiller JI : Large Scale Distributed Systems Administration, USENIX Association, Baltimore, Maryland, June, 1989.
- (P20) Geer DE : Open Network Authentication and Authorization, on-site tutorial, National Security Agency, Fort Meade, Maryland, June, 1989.
- (P21) Geer DE : Distributed Computing Environments for the Technical Workplace, Bell Communications Research, Princeton, New Jersey, June, 1989.
- (P22) Geer DE & Rosenstein MA : Scalable System Management, EduCom 25th Meeting, Ann Arbor, Michigan, October, 1989.
- (P23) Geer DE : Distributed Computing for the Technical Workplace, MIT Industrial Liaison Program - Financial Services Seminar Series, Bankers Trust, New York, New York, November, 1989.
- (P24) Geer DE : Athena Response to the OSF Distributed Computing Environment RFT, Open Software Foundation Membership Review Meeting, Boston, Massachusetts, November, 1989.
- (P25) Geer DE : Panelist, Distributed Services and Standardization, Open Software Foundation Membership Review Meeting, Boston, Massachusetts, November, 1989.
- (P26) Geer DE : Distributed Computing for the Technical Workplace, MIT Industrial Liaison Program - Financial Services Seminar Series, The Analytic Sciences Corp., Burlington, Massachusetts, December, 1989.
- (P27) Geer DE : Project Athena and Distributed Computing, Invited Full-Day Tutorial, European Unix Users Group, Munich, FRG, April 24, 1990.
- (P28) Geer DE : Software: The Make or Break Component of the 90's, Eighth Biennial Executive Forum, Arthur D. Little, Boston, Massachusetts, June 11, 1990.
- (P29) Geer DE : The Kerberos Authentication System Invited presentation to the Distributed Computing Working Group, Unix International, Parsippany, New Jersey, June 12, 1990.
- (P30) Geer DE : New Platforms for Researchers Work-In-Progress session, USENIX Association, Phoenix, Arizona, June 14, 1990.
- (P31) Geer DE : An Ultrix 4.0 Uniserver, Mach Workshop, USENIX Association, Burlington, Vermont, October 4, 1990.
- (P32) Geer DE : Wide Area Network Service Management, American Society of Aeronautic & Astronautic Engineers, Lynn, Massachusetts, October 5, 1990.
- (P33) Geer DE : Panelist, Whither Unix Networking, InterOp, San Jose, California, October 19, 1990.
- (P34) Geer DE : Athena, Migration and Technical Environment,

Ultrix/RISC Symposium, Chelmsford, Massachusetts, October 22, 1990.

- (P35) Geer DE : The Kerberos Authentication System, Invited paper, Computer Security Institute, Atlanta, Georgia, November 14, 1990.
- (P36) Geer DE : Network Service Environments for the Technical Worker, Invited Full-Day Tutorial, Uniforum, San Diego, California, January 21, 1990.
- (P37) Geer DE : Athena as a Paying Service, Ultrix/RISC Symposium, Cambridge, Massachusetts, April 2, 1991.
- (P38) Geer DE & Rochlis JA : The Kerberos Authentication System, Invited Full-Day Tutorial, BU/Wang Unix Challenge, Boston, Massachusetts, April 11, 1991.
- (P39) Geer DE & Kohl JT : The Kerberos Authentication System, Invited Full-Day Tutorial, EurOpen, Tromso, Norway, May 20, 1991.
- (P40) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial T6, USENIX Association, Nashville, Tennessee, June 11, 1991.
- (P41) Geer DE, Kohl JT & Neuman BC : Network Security, Kerberos Present & Future, Los Alamos National Laboratory, Los Alamos, New Mexico, June 26-27, 1991.
- (P42) Geer DE : Distributed Computing for the Technical Workplace, University of Georgia Annual Computing Conference, Rock Eagle, Georgia, October 9, 1991.
- (P43) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial M2, USENIX Association, San Francisco, California, January 21, 1992.
- (P44) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Cambridge, Massachusetts, February 3, 1992.
- (P45) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Palo Alto, California, February 10, 1992.
- (P46) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Maynard, Massachusetts, February 12, 1992.
- (P47) Geer DE : Open for Communication, Keynote, Swiss DECUS, Lausanne, Switzerland, March 31, 1992.
- (P48) Geer DE : Distributed Computing and Management, Tutorial Ecole Polytecnic Federal, Lausanne, Switzerland, April 2, 1992.
- (P49) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Grenoble, France, April 7, 1992.

- (P50) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Cambridge, Massachusetts, April 13, 1992.
- (P51) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial T2, USENIX Association, San Francisco, California, January 26, 1993.
- (P52) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, ComNet, Washington, D.C., February 1, 1993.
- (P53) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, Digital Equipment Corp, Maynard, Mass., February 5, 1993.
- (P54) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, Digital Equipment Corp, Maynard, Mass., February 9, 1993.
- (P55) Geer DE : Security - State of the Art, Information Systems Security Association, New York, N.Y., March 9, 1993.
- (P56) Geer DE : Panelist, Security and Distributed Systems Management, Uniform, San Francisco, California, March 18, 1993.
- (P57) Geer DE : Lessons Learned from Project Athena, Seminar, Stanford University, March 19, 1993.
- (P58) Geer DE : The Open Software Foundation's Distributed Management Environment, Tutorial, DEXPO, June 8, 1992.
- (P59) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, Information Systems Security Association, New York, N.Y., June 16, 1993.
- (P60) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, USENIX Association, Cincinnati, Ohio, June 21, 1993.
- (P61) Geer DE : Panelist, Systems Management, Client-Server East, Washington, D.C., August 20, 1993.
- (P62) Geer DE : Security of Management, UNIX Expo, New York, N.Y., September 22, 1993.
- (P63) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, MITRE Corp, Lexington, Mass., October 5, 1993.
- (P64) Geer DE : The Kerberos Authentication System, Tutorial, Computer Security Institute, Anaheim, California, November 12, 1993.
- (P65) Geer DE : The Kerberos Authentication System, Tutorial, British Columbia Systems Corp, Victoria, B.C., Canada, December 7, 1993.
- (P66) Geer DE & Rochlis JA : Security Issues in a Distributed

- Environment - The Kerberos Approach, Tutorial, USENIX Association, San Francisco, Calif., January 21, 1994.
- (P67) Geer DE : Kerberos-based Network Security, Back Bay LISA, Cambridge, Mass., February 23, 1994.
- (P68) Geer DE : Security as an Enabling Technology, Invited paper, SANS 3, Washington, D.C., April 7, 1994.
- (P69) Geer DE : Kerberos & Network Security, Invited talk, Networks Expo, San Francisco, Calif., April 21, 1994.
- (P70) Geer DE : Panelist, Security Technologies, InterOp, Las Vegas, Nevada, May 5, 1994.
- (P71) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, USENIX Association, Boston, Mass., June 6, 1994.
- (P72) Geer DE : Breaking Into Banks - Lessons Learned from Financial Services, Invited Talk, USENIX Association, Boston, Mass., June 8, 1994.
- (P73) Geer DE : Panel Chair, Security in Distributed Systems, Sunworld, San Francisco, Calif., June 15, 1994.
- (P74) Geer DE : Panelist, Making Management Easier & Less Painful, Sunworld, San Francisco, Calif., June 16, 1994.
- (P75) Geer DE : Panelist, Trusted Networks for Client-Server Computing, InterOp, Atlanta, Georgia, September 14, 1994.
- (P76) Geer DE : Panelist, Towards Better Security for the Internet, InterOp, Atlanta, Georgia, September 14, 1994.
- (P77) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, EDP Auditors Association & Information Systems Security Association, New York, N.Y., September 21, 1994.
- (P78) Geer DE : Breaking Into Banks - Lessons Learned from Financial Services, Invited Talk, LISA, San Diego, Calif., September 22, 1994.
- (P79) Geer DE : Panelist, Distributed Systems - Security Focus, UNIX Expo, New York, N.Y., October 4, 1994.
- (P80) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Mini-Tutorial, UNIX Expo, New York, N.Y., October 5, 1994.
- (P81) Geer DE : Breaking Into Banks - Lessons Learned from Financial Services, Invited Talk, Back Bay LISA, Cambridge, Mass., November 9, 1994.
- (P82) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, Sun Users Group, Austin, Texas, November 17, 1994.
- (P83) Geer DE : Communications - Use, Misuse and Security, The

Economy Club, Cambridge, Mass., November 28, 1994.

- (P84) Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Mini-Tutorial, Technology Transfer Institute, Washington, D.C., December 2, 1994.
- (P85) Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, USENIX Association, New Orleans, Louisiana, January 17, 1995.
- (P86) Geer DE : Lessons Learned from Project Athena, Software Development, San Francisco, Calif., February 17, 1995.
- (P87) Geer DE : Keynote, National Oceanic and Atmospheric Administration Security Symposium, Silver Spring, Maryland, April 5, 1995.
- (P88) Geer DE : Session Chair and Member of the Program Committee. USENIX Association Workshop on Mobile and Location Independent Computing, Ann Arbor, Michigan, April, 1995.
- (P89) Geer DE : Network Security Fundamentals, Industry-Wide Security Commission, Securities Industry Automation Corporation, New York City, April 18, 1995.
- (P90) Geer DE : Security Technology: Enabler or Disabler?, SANS 4, Washington, D.C., April 27, 1995.
- (P91) Geer DE : Kerberos Today, Computer Audit, Control and Security Conference (CACS), Atlanta, Georgia, May 3, 1995.
- (P92) Geer DE : Keynote, Dept. of Commerce Internet Users Association, Washington, D.C., May 5, 1995.
- (P93) Geer DE : Keynote, Three Commercial Foci for Network Security, Armed Forces Communications Engineering Association, Fort Meade, Maryland, May 19, 1995.
- (P94) Geer DE : Security of Management, Management of Security, Computer Security Institute, New Orleans, Louisiana, June 12, 1995.
- (P95) Geer DE : Network Security Management, SAIC Industry Exhibition and Showcase, Alexandria, Virginia, June 16, 1995.
- (P96) Davis D & Geer DE : Kerberos Security with Clocks Adrift, 5th USENIX UNIX Security Symposium, Salt Lake City, Utah, June 6, 1995.
- (P97) Geer DE : Security -- The Enabling Technology for Electronic Commerce, EDI 2000, Cambridge, Massachusetts, July 27, 1995.
- (P98) Geer DE : News from the Front -- Electronic Commerce, New York Systems Administrators, New York City, August 15, 1995.
- (P99) Geer DE : Electronic Commerce: What It Means to You, 9th LISA Systems Administration Conference, USENIX/SAGE, Monterey, California, September 21, 1995.

- (P100)
Geer DE : Panelist, Computing in the Year 2000, 9th LISA Systems Administration Conference, USENIX/SAGE, Monterey, California, September 21, 1995.
- (P101)
Geer DE : Security in Commerce, Commerce in Security, 22nd Computer Security Conference, Computer Security Institute, Washington, D.C., November 6, 1995.
- (P102)
Geer DE : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, Network Security '95, Washington, D.C., November 15, 1995.
- (P103)
Geer DE & Rochlis JA : Security Issues in a Distributed Environment - The Kerberos Approach, Tutorial, USENIX Association, San Diego, California, January 22, 1996.
- (P104)
Geer DE : Practical Challenges of Providing Coherent Network Security in the Age of Collaborative Computing, Tutorial, ComNet, Washington, D.C., January 29, 1996.
- (P105)
Geer DE : The Internet: Commerce, Security, and Identity, Ciba-Geigy Information Systems Seminar, Greensboro, N.C., March 26, 1996.
- (P106)
Geer DE : Panelist, Will Internet Commerce Succeed?, System Administration Network Security Conference, Washington, D.C., May 15, 1996.
- (P107)
Geer DE : Security Issues with Mobile Computing, System Administration Network Security Conference, Washington, D.C., May 15, 1996.
- (P108)
Geer DE : Electronic Commerce Administration Issues, System and Network Administration Conference, New York City, May 23, 1996.
- (P109)
Geer DE : Kerberos -- Cream of the Crop, Information Systems Security Association, New York City, June 6, 1996.
- (P110)
Geer DE : Commerce, Security and Identity, Information Systems Security Association, New York City, June 6, 1996.
- (P111)
Geer DE & Neuman BC : Security Mechanisms for Electronic Commerce, Annual Technical Meeting and Show, Net-world+Interop Atlanta, Georgia, September 18, 1996.
- (P112)
Geer DE & Rochlis JA : Security on the World Wide Web,

Tutorial, LISA-10, USENIX Association/SAGE combined, Chicago, Illinois, October 1, 1996.

- (P113)
Geer DE & Rochlis JA : Security on the World Wide Web, Tutorial, 2nd Symposium on Operating Systems Design and Implementation, USENIX/ACM/IEEE combined, Seattle, Washington, October 28, 1996.
- (P114)
Geer DE : Breaking into the Web, Tutorial, 2nd Workshop on Electronic Commerce, USENIX Association, Oakland, California, November 18, 1996.
- (P115)
Geer DE : Panelist, Electronic Commerce in Practice, 2nd Workshop on Electronic Commerce, USENIX Association, Oakland, California, November 20, 1996.
- (P116)
Geer DE : Session Chair and Member of the Program Committee. 2nd Workshop on Electronic Commerce, USENIX Association, Oakland, California, November, 1996.
- (P117)
Geer DE : Electronic Commerce and Web Security, Technical Series, Security Industries Automation Corp., New York, New York, December 9, 1996.
- (P118)
Geer DE : An Introduction to Cryptography, Training Series, Security Industries Automation Corp., New York, New York, December 9, 1996.
- (P119)
Geer DE & Rochlis JA : Security on the World Wide Web, Tutorial, Annual Technical Conference, USENIX Association, Anaheim, California, January 6, 1997.
- (P120)
Geer DE & Rochlis JA : The Kerberos Approach to Network Security, Tutorial, Annual Technical Conference, USENIX Association, Anaheim, California, January 7, 1997.
- (P121)
Geer DE & Rochlis JA : The Kerberos Approach to Network Security, Tutorial, NetSec 97, SANS/Escal Institute, New Orleans, Louisiana, October 24, 1997.
- (P122)
Geer DE & Rochlis JA : Security on the World Wide Web, Tutorial, NetSec 97, SANS/Escal Institute, New Orleans, Louisiana, October 25, 1997.
- (P123)
Geer DE & Rochlis JA : World Wide Web Security, Tutorial, 7th USENIX Security Symposium, San Antonio, Texas, January 26, 1998.
- (P124)

Geer DE : Security for Extranets, Panelist, Internet Commerce Expo, Boston, Massachusetts, March 26, 1998.

(P125)

Geer DE & Rochlis JA : World Wide Web Security, Tutorial, The Internet Security Conference, San Jose, California, April 6, 1998.

(P126)

Geer DE : Privacy = Freedom, panelist, Stevens Institute, Washington, D.C., May 4, 1998.

(P127)

Geer DE & Rochlis JA : World Wide Web Security, Tutorial, Networld+Interop, Las Vegas, Nevada, May 6, 1998.

(P128)

Geer DE & Rochlis JA : World Wide Web Security, Tutorial, SANS, Monterey, California, May 14, 1998.

(P129)

Geer DE & Rochlis JA : The Kerberos Approach to Network Security, Tutorial, SANS, Monterey, California, May 15, 1998.

(P130)

Geer DE & Rochlis JA : World Wide Web Security, Tutorial, USENIX, New Orleans, Louisiana, June 16, 1998.

(P131)

Geer DE : Problems in Security for Large-Scale Distributed Systems, 17th IEEE Workshop on Reliability in Distributed Systems, Purdue University, Lafayette, Indiana, October 20, 1998.

(P132)

Geer DE & Rochlis JA : World Wide Web Security, Tutorial, Networld+Interop, Atlanta, Georgia, October 22, 1998.

(P133)

Geer DE : Security Issues in Electronic Commerce, Invited Lecture, Electronic Commerce Essentials '98, Massachusetts Electronic Commerce Association, Waltham, Mass., October 27, 1998.

(P134)

Geer DE & Rochlis JA : The Kerberos Approach to Network Security, Tutorial, SANS, Orlando, Florida, October 28, 1998.

(P135)

Geer DE : Risk Management is Where the Money Is, The Digital Commerce Society of Boston, Boston, Mass., November 3, 1998. (widely re-printed including, but not limited to, RISKS 20.06, ECARM, RRE, UCSD 268D Social Aspects of Technology)

(P136)

Geer DE : The Impact of Athena on the Technology Marketplace, panelist, Athena 15th anniversary Retrospective Sym-

posium, Cambridge, Mass., January 20, 1999.

- (P137)
Geer DE : The Risk Equation in Electronic Commerce, Inaugural Conference on Electronic Government, Tallahassee, Fla., January 26, 1999.
- (P138)
Geer DE : Building Trust for Electronic Commerce, Securities Industry Middleware Council, New York, N.Y., February 16, 1999.
- (P139)
Geer DE & Rochlis JA : Modern Security Protocols, Tutorial, The Internet Security Conference, San Jose, California, April 19, 1998.
- (P140)
Geer DE & Rochlis JA : Modern Security Protocols, Tutorial, Networkworld+Interop, Las Vegas, Nevada, May 10, 1999.
- (P141)
Geer DE : Privacy in the Real World, Smart Card Forum, Washington, D.C., May 20, 1999.
- (P142)
Geer DE & Rochlis JA : Modern Security Protocols, Tutorial, USENIX Annual Conference, Monterey, California, June 8, 1999.
- (P143)
Geer DE & Rubin A : Cryptography - From the Basics Through PKI in 23,400 Seconds, Tutorial, USENIX Security Symposium, Washington, D.C., August 24, 1999.
- (P144)
Geer DE : Privacy: It's not the Odds, It's the Stakes, Smart Card Forum Annual Meeting, Washington, D.C., September 23, 1999.
- (P145)
Geer DE & Rochlis JA : Modern Security Protocols, Tutorial, The Internet Security Conference, Boston, Massachusetts, October 12, 1999.
- (P146)
Geer DE : Security as Enabler for Electronic Commerce, Guest Lecture, Boston College, School of Law, Boston, Massachusetts, November 1, 1999.
- (P147)
Geer DE & Rochlis JA : Modern Security Protocols, Tutorial, LISA-13, USENIX Association/SAGE combined, Seattle, Washington, November 7, 1999.
- (P148)
Geer DE : Security -- Need to Know, Invited Presentation, Massachusetts Continuing Legal Education, Boston, Massachusetts, November 18, 1999.

(P149)

Geer DE : Privacy: It's not the Odds, It's the Stakes, Consumer Federation of America, Washington, D.C., December 3, 1999.

M I S C E L L A N E O U S

- (M1) Member of Evaluation Team, Distributed Management Environment Request for Technology, Open Software Foundation, Cambridge, Massachusetts, 1990-1991.
- (M2) Peer Review of the Computer Systems Lab, National Institutes of Health, Bethesda, Maryland, January - May, 1992.
- (M3) Keynote speaker, Swiss DECUS, October, 1991.
- (M4) Keynote speaker and tutorial instructor, Chilean High Technology Conference, Fundacion Chile, Santiago, Chile, May, 1992.
- (M5) Keynote speaker, German Unix Users Group (GUUG), Weisbaden, Germany, September 16, 1993.
- (M6) The Price of Cryptographic Export Controls, Testimony, Department of Commerce & Rep. Maria Cantwell, Washington, D.C., January 25, 1994.
- (M7) Public Policy in an age of Electronic Commerce, Testimony, House Science Committee, Sub-Committee on Technology, Washington, D.C., November 26, 1996.
- (M8) Computer Security and the Role of Congress, Testimony, House Science Committee, Sub-Committee on Technology, Washington, D.C., February 11, 1997.
- (M9) Driving the Future, Why the Financial Community Rules, Keynote speaker, NetSec 97, New Orleans, Louisiana, October 22, 1997.
- (M10) Breaking into Banks, Featured speaker, Engineering Summit, Digital Equipment Corporation, Lowell, Massachusetts, December 15, 1997.
- (M11) Winner first annual "Mass eComm10" award, given by the Massachusetts Electronic Commerce Association to the ten most influential drivers of electronic commerce in Massachusetts, Boston, Massachusetts, March 23, 1998.
- (M12) Privacy, given as an invited competitor, WFB Silver Medalist Oratory Competition, Buckley School of Public Speaking, Camden, South Carolina, May 8, 1998.
- (M13) Tired = "Trust Management" v. Wired = "Risk Management" Wired Magazine, March 1999 "Futurama" issue, p. 74.

C I V I C I N V O L V E M E N T

1974-1989	Cambridge Civic Association Member, 1974-1989 Nominating Committee, 1/89
1974-1976	Returnable Bottle Initiative Petition - Cambridge Coordinator
1974-1987	North Cambridge Stabilization Commiteee, member
1977-present	Boston Area Bicycle Coalition / Bicycle Coalition of Massachusetts Member, 1977-present Board member, 70's Newsletter coordinator, 1975 Safety & Education Chair, 1977
1987-1992	Bellis Circle Neighborhood Association Member, 10/87-9/92 Chair, 6/88-9/92
1988-present	Cambridge Citizens for Liveable Neighborhoods Board Member, 10/88-present Co-Chair, 3/89-present President, 1991-present
1987-1992	Neighborhood 9 Association Member, 10/87-9/92 Board, 11/89-9/92
1988-end	Plaintiff, Mcmanus, et al. vs. Teso, et al. for enforcement of Clean Air Act
1988-1990	Chief plaintiff, Geer et al. vs. Dukakis, et al. for enforcement of Clean Air Act (successful)
1989-1993	Cambridge Rainbow, Member
1989-present	Cambridge Tenants Union, Member
1989-present	Coalition for Alewife, Convener and Co- Chair
1990-present	Citywide Central Artery / Scheme Z Task Force, Chair
1991	Clean Air Act, Mass. State Implementation Plan, Working Committee Member
1991-1993	Elected representative, Ward 10, City Democratic Committee
1991	Regional Finalist, White House Fellows, Washington, D.C. (Withdrew to found own company.)

1993-present Charles River Crossing Coalition,
Convener and Co-Chair

1993-present Chief plaintiff, Geer et al. vs.
Bedingfield, et al. for enforcement of
the Massachusetts Environmental Policy
Act with regard to the State Highway
Department and the Charles River

Member of and contributor to numerous other action-oriented
organizations.