LANCE J. HOFFMAN

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Education

B. S. Mathematics, Carnegie Institute of Technology (now Carnegie Mellon University) 1964

M. S. Computer Science, Stanford University 1967

Ph. D. Computer Science, Stanford University 1970

Faculty Appointments

Professor, The George Washington University, Computer Science Department, 1977-Director, The George Washington University Cyberspace Policy Institute, 1993-Queensland University of Technology, Information Security Research Center, 1992 Assistant Professor, University of California, Berkeley, 1970-1977

Testifying on encryption policy before the Senate Commerce Committee, June 10, 1999

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Books Authored or Edited

Building in Big Brother (Editor), Springer-Verlag, New York, N. Y., 1995. Rogue Programs: Viruses, Worms, and Trojan Horses (Editor), Van Nostrand Reinhold, New York, N. Y., 1990. Computers and Privacy in the Next Decade (Editor), Academic Press, New York, N. Y., 1980. Modern Methods for Computer Privacy and Security, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1977. Security and Privacy in Computer Systems (Editor), Melville Publishing Co., Los Angeles, California, 1973.

Selected Papers and Reports

(with Rachna Dhamija and Rachelle Heller) "Teaching E-Commerce to a Multidisciplinary Class: Lessons Learned", Communications of the ACM 42, 9 (September 1999), pp. 50-55.

(with David M. Balenson, Karen A. Metivier-Carreiro, Anya Kim, and Matthew G. Mundy) Growing Development of Foreign Encryption Products in the Face of U. S. Export Regulations, The George Washington University Cyberspace Policy Institute, Report GWU-CPI-1999-02 (June 1999).

AData security and privacy in health information systems@, Topics in Emergency Medicine 17, 4 (December 1995), pp. 24-26

(with P. C. Clark) "BITS: A Smartcard Protected Operating System", Communications of the ACM 37, 11 (November 1994), pp. 66-94. (with F. Ali, S. Heckler, and A. Huybrechts) "Cryptography Policy", Communications of the ACM 37, 9 (September 1994), pp. 109-117.

"Clipping Clipper", *Communications of the ACM 36*, 9 (September 1993). (with J. Fitch) "A Shortest Path Network Security Model", *Computers and Security 12*, 2 (March 1993), Elsevier, Oxford, U.K., pp. 169-189 (with P. C. Clark) "Imminent Policy Considerations in the Design and Management of National and International Computer Networks", IEEE Communications Magazine, Vol. 29, No. 2, (February 1991), pp. 68-74.

(with W. F. Miller) "Getting a Personal Dossier from a Statistical Data Bank", Datamation, May 1970. "Computers and Privacy: A Survey", Computing Surveys, Vol. 1, No. 2 (June 1969), pp. 85-103.

Selected Panels and Invited Talks

	Sciected Fahels and Invited Fahs
1999	Panel Chair, "Teaching Information WarfareLessons Learned", 22nd National Information Systems Security
	Conference
1999	Presenter, "How the Internet Works", 22 nd Mid-Winter Institute, American Intellectual Property Law Association
1997	Invited speaker, U. S. Congress Internet Caucus, "Privacy Issues Unique to the Internet"
1996-1997	Featured Speaker, "Security and Privacy Policy Issues in Emerging National and Global Networks", at Inside Washington:
	Business and Public Policy workshop, Brookings Institution
1996	AInternet Security: New Problems, New Solutions®, Conference on The Internet: Beyond the Year 2000
1996	Moderator, ALaw Enforcement on the Internet: Prosecutions and Privacy@, D. C. Bar 1996 Winter Convention
1995	Keynote speaker, "Encryption Policy for the Global Information Infrastructure", 11th International Information
	Security Conference, IFIP/SEC '95, Capetown, South Africa
1994	Organizer and featured speaker, "Encryption Wars on the Global Information Highway:
	Beyond the Clipper Chip Battle", Center for Strategic and International Studies
1994	Co-moderator, "The Great Clipper Debate: National Security or National Surveillance",
	Georgetown University Law School
1992	Invited speaker, Vulnerability, International Federation of Information Processing Congress,
	Madrid
1989	Testimony before U. S. Congress House of Representatives Committee on Government

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Operations on the Computer Security Act of 1987 and Committee of	n the Judiciary on computer
virue logislation	

1979-1980 1972-1973

virus legislation
Distinguished Visitor, IEEE Computer Society
Association for Computing Machinery National Lecturer on Computer Security and Privacy

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Major Meetings Organized and Facilitated

1995	Moderator, AEA/SPA Cryptography Policy Workshop
1991-1992	General Chair, The Second Conference on Computers, Freedom, and Privacy, Washington, DC
1981	Co-organizer, ABA/AFIPS National Symposium on Personal Privacy and Information Technology, Amelia Island, Fla.
1979	Organizer, AFIPS Asilomar Conference on Computers and Privacy in the Next Decade

Selected Honors

1995-	Fellow, Association for Computing Machinery
1991-1994	Chair, IEEE Committee on Communications and Information Policy, Information Security Subcommittee
1985-	Member, International Board of Editors, Computers and Security
	January 5, 2000

Courses Taught

Electronic Commerce, Information Warfare, Cryptography, Information Policy, Technical Methods for Computer Security, Computer Viruses, Privacy in the Computer Age, Programming Techniques and Data Structures, Assembly Language, Introduction to Computer Programming, Operating Systems, Computers and Society, Risk Analysis

Society Memberships

Association for Computing Machinery (Special Interest Groups: Security, Audit, and Control; Computers and Society; Internet Governance Committee)

Senior Member, Institute for Electrical and Electronics Engineers IEEE Computer Society, Technical Committee on Security and Privacy

Listed in Who's Who in Science and Engineering and American Men and Women of Science

Public Sector Consulting

U. S. Navy. Developed and presented turnkey offsite courses and workshops on information policy and on electronic commerce Internal Revenue Service. Advised on privacy implications of new system design.

U. S. Army. Advised researchers on computer virus characteristics and implications.

Secret Service. Prepared and delivered a short course on expert systems and risk analysis, including hands-on training and development of models specific to participant needs.

National Science Foundation. Advised government officials on preparation of reports for the National Science Board; site visits to evaluate research work done by grantees.

U. S. Congress, Office of Technology Assessment. Prepared reports on domestic agencies active in information policy issues and on security and privacy considerations in the design and management of a national research and education network.

Social Security Administration. Convened and managed task force of lawyers, auditors, and computer specialists on privacy and security. National Bureau of Standards (now National Institute of Standards and Technology). Carried out a technology analysis and exploratory studies for possible federal standards covering risk assessment

Federal Trade Commission. Made recommendations related to the design and operation of large computer systems in conjunction with an investigation.

U. S. Treasury. Expert panel on computer system security.

Public Defender Service for the District of Columbia. Expert consulting in computer-related theft case.

SEARCH Group, Inc. Developed audit procedures for criminal justice information systems.

Advisory Committees (Past and Present)

Y2K Preparedness, Town of Chevy Chase World Wide Web Consortium IBM Emergency Response Service Center for Democracy and Technology Information Systems Security Journal California Assembly Committee on Statewide Information Policy

Media Experience

ABC Nightline, CBS-TV News, Fox Morning News, Fox TV, Cable News Network, CNBC, WAMU Diane Rehms Show, Mike Cuthbert Show, ABC Radio Network, KQED, and the Christian Broadcasting Network and numerous local radio and television shows. Dr. Hoffman has been cited in articles appearing in *The New York Times, Washington Post, Los Angeles Times, National Journal, Associated Press, Scientific American, Scientist, Omni, Popular Science*, and many other publications.

Private Sector Consulting

Washington law firm. Expert consultant, intellectual property case. International Technology Consultants, Inc. Expert technical and strategic advice on worldwide encryption market study.

<u>California law firm.</u> Expert witness on software intellectual property case.
<u>California law firm.</u> Expert consultant on virus checking in network systems
<u>Principal Financial Group.</u> Security and privacy awareness training for
information technology staff members

Bankers Roundtable. Consultant on strategic security planning
D. C. Law Firm, Expert consultant in cryptography case
IBM Internet Emergency Response Service. Strategic planning.
American Association of University Women. Evaluation of computer

<u>Equifax</u>, Inc. Produced recommendations on strategic planning, required elements of secure electronic commerce, and external support requirements related to the information superhighway.

<u>Software Productivity Consortium</u>. Produced a white paper on encryption policy.

CyberCash, Inc. Produced a white paper on privacy issues related to cyberpayments. Developed a privacy code. Advised on WWW presence. Developed educational format for multi-level, multi-audience presentations of technical and procedural aspects of system. Other strategic planning aid. IBM Corporation. Preparation of and performance in a multi-city lecture tour to energize customers, prospects, and employees about computer security. This involved lectures, meetings with clients, prospects, and employees, and interviews with the media.

<u>Stratus Computer, Inc.</u> Assisted in developing and played an on-camera role in video news release on continuous availability in on-line systems. <u>CyberMark, Inc.</u> Analysis of legislative, regulatory, and technical aspects of computer systems privacy and security as they relate to planned product offerings.

<u>Software Publishers Association</u>. Produced a study of foreign and domestic availability of cryptographic products and demand. Gave strategic advice regarding lobbying effort to reverse government policy.

<u>Major California Bank</u>. Analyzed privacy problems and recommended appropriate confidentiality and security measures.

Ernst and Whinney. Made technical recommendations on generalized risk analysis and on contingency planning.

Computer Manufacturer, Office of Personnel Management, Mobil Oil Corporation. Developed and taught an in-house seminar on computer security and privacy.

Washington Legal Firm. Expert witness in computer fraud and software theft case.

Washington Economic Consulting Firm. Assistance in litigation support for a major communications case.