



**Instrumentation Research
Weizmann Institute of Science
Summer 1986**



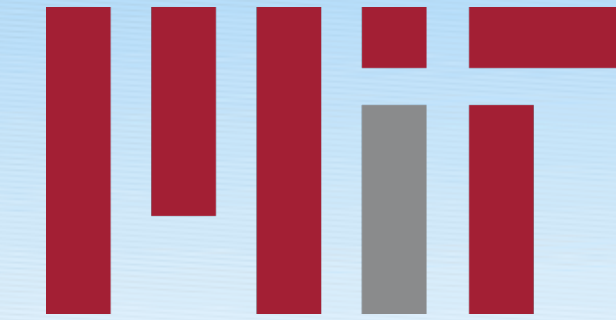
**Hard Drive Research
Harvard University
2006**

Background and Bio

Career #1: Science writer & entrepreneur

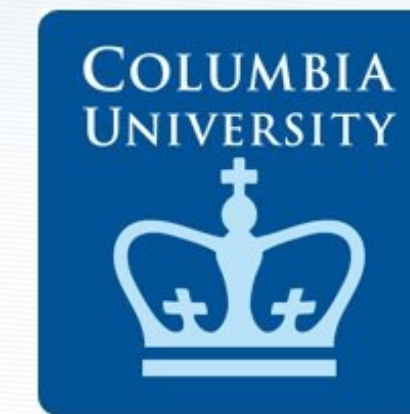
1983–1987 — Massachusetts Institute of Technology

- SB Chemistry; SB Political Science; SB Science, Technology & Society
- Thesis: Radio Research, McCarthyism and Paul F. Lazarsfeld



1987–1988 — Columbia University School of Journalism

- MS Journalism (Science Journalism)
- Thesis: *Tenant Screening Services in the United States* —



1988–2002 — Freelance writer, computer consultant, entrepreneur

- 1988–1993 — Science writer @ *The Christian Science Monitor*
- 1988–1990 — Consultant @ Polaroid, medical imaging workstation
- 1995–2002 — President @ Vineyard.NET Internet Service Provider
- 1997–2002 — Columnist @ *The Boston Globe*
- 2002–2005 — Columnist @ *Technology Review*
- 1998–2005 — Founder, Treasurer, Chief Scientist @ Sandstorm



First focus area — impact of computers on society

Tenant Screening Services or Tenant Blacklisting?

BY SIMSON L. GARFINKEL

Ruth Cisneros is trapped in her apartment by a computer she has never seen. Seven years ago, Cisneros'

landlord of three months wanted her out. "I don't want you here and that's that," Cisneros said the landlord told her.

The landlord sued to have Cisneros evicted, but the judge dismissed the suit as groundless. At the end of the year, Cisneros' landlord had a change of heart and renewed the lease. Twice more the cycle repeated. The only real effect of the suits was to put a notation in a private company's computer that somebody had filed three times to get Cisneros evicted.

The problem is that nearly all of Southern California's landlords use that computer to help evaluate rental applications. If somebody has ever tried to evict you, you don't get the apartment. Often you don't even get a phone call back.

In March 1987, Cisneros applied to live in the Promenade Apartments. Her application was rejected because the computer, operated by the UD Registry Inc., provided the Promenade with a record of the three eviction attempts. Even a letter from Cisneros' new landlord saying that she was a model tenant wasn't enough to counteract the judgement of the computer.

California state law forbids companies from reporting eviction actions in which the tenant is victorious. But the owner of the computer, Harvey Saltz, said having a suit dismissed is not the same as having the tenant win in court. Cisneros, along with eight other people, have filed suit against UDR for damages resulting from faulty reporting. The case is still pending.

Computerized tenant screening services (TSSs) like UDR now operate in many cities. TSS operators say they provide an indispensable tool that allows landlords to distinguish "good" tenants from "bad"

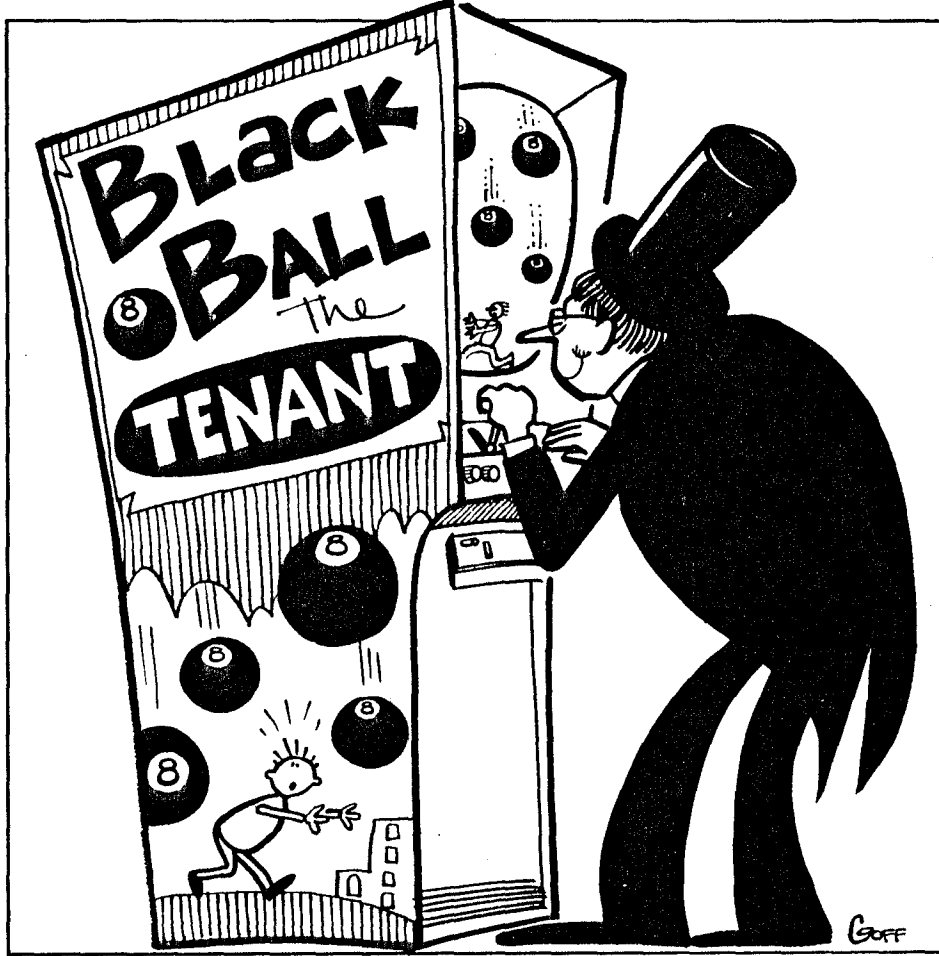
applicant's credit and eviction history is displayed on the operator's computer screen within fifteen seconds. "People get all of the information before they hang up the phone," said Saltz.

"We give the little guys access to big brother," said Neil Van Sant, co-owner of Ties Landlord Information Exchange (Howell, New Jersey). Much of the information reported by TSSs has always been available, but until now it has always been too cumbersome for landlords to search the records. Screening services change that.

The theory is that if a person has a history of being a problem tenant the behavior pattern is likely to continue. But some of the information reported, like successfully defending a rent strike in court, can only be used by landlords to discriminate

of her allegations are true and that nothing he has done is illegal.

Attempts to regulate TSSs have failed in several states and in Congress. As for the federal Fair Credit Reporting Act — the law that Congress passed in 1970 to stymie abuses in the credit reporting industry — few of its terms are applicable to TSSs, and the agency which polices the law says that it may not even apply.



Big Brother is Watching

Most services charge between \$10 and \$30 for a report. This charge can be passed on to tenants as an "application fee." The search is initiated by a telephone call from

against a tenant who knows his rights. "It's not a credit check it's an organization check," said Phyllis Salowe-Kaye, president of the New Jersey Tenants Organization.

IRB

Sept/Oct. 1988

AIDS and The Soundex Code

by Simson L. Garfinkel

ELECTROSPHERE

The Dean of Disaster

Plane crashes, nuclear reactor accidents, explosions at chemical plants – if computers were at fault, Peter Neumann knows all about it.

By Simson L. Garfinkel



He's a fantastic storyteller, he's always ready with a pun, and he can play two recorders at once – simultaneously piping out both melody and accompaniment – while he beats the rhythm with his foot. But to hundreds of thousands of people around the world, Peter G. Neumann is best known for moderating RISKS-Forum, one of the Internet's most widely read electronic forums.

last page of *Communications of the Association for Computing Machinery*, the journal of the ACM. He's also putting the finishing touches on a book about software safety and risks. Its tentative title? "*RISKS: The Book* – as opposed to RISKS the movie and RISKS the game," Neumann jokes.

Neumann got his start with computers in 1953 as an undergraduate at Harvard. There he worked on the Har-

Especially relevant given the increased focus on Algorithmic Transparency & Accountability

15 Books (1991–2014) — 9 collaborators

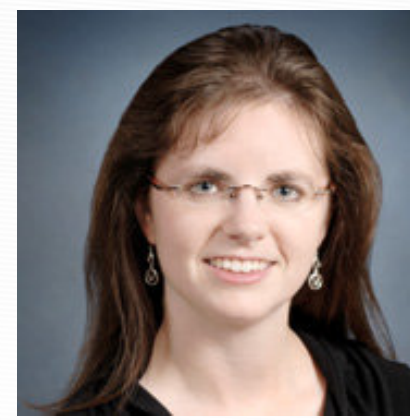
- 1991 - Practical UNIX Security (w/ Gene Spafford)
- 1992 - NeXTSTEP Programming (w/ Michael Mahoney)
- 1994 - PGP: Pretty Good Privacy
- 1994 - The UNIX-Haters Handbook (w/ D. Weise & S. Strassmann)
- 1996 - Practical UNIX and Internet Security (w/ Gene Spafford)
- 1997 - Web Security and Commerce (w/ Gene Spafford)
- 1998 - Stopping Spam (w/ Alan Schwartz)
- 1999 - Architects of the Information Society (w/ Hal Abelson)
- 2000 - Database Nation
- 2002 - Web Security, Privacy & Commerce (w/ Gene Spafford)
- 2002 - Building Cocoa Applications (w/ Michael Mahoney)
- 2003 - Practical UNIX and Internet Security (w/ Gene Spafford & Alan Schwartz)
- 2005 - RFID: Applications, Security and Privacy (w/ Beth Rosenberg) + contributors
- 2005 - Security and Usability (w/ Lorrie Cranor) + contributors
- 2014 - Usable Security: History, Themes and Challenges (w/ Heather Lipford)



Hal Abelson



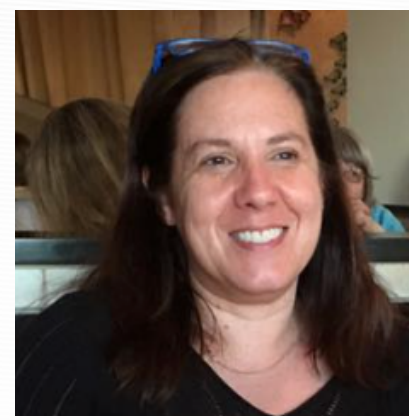
Lorrie Cranor



Heather Lipford



Michael K. Mahoney



Beth Rosenberg



Alan Schwartz



Gene Spafford



Steve Strassmann

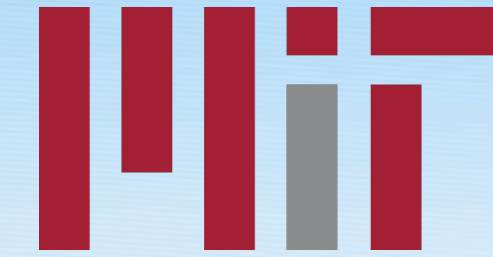


Daniel Weise

Career #2: Academic

2002–2005 — Massachusetts Institute of Technology

- PhD Computer Science
- Thesis: Design Principles and Patterns for Computer Systems That Are Simultaneously Secure and Usable



2006–2007 — Harvard University School of Eng. and Applied Sciences

- Postdoctorate fellow, Center for Research on Computation and Society
- Digital forensics and privacy



2007–2014 — Naval Postgraduate School (Monterey & Arlington)

- Associate Professor (tenured 2012), Dept. of Computer Science.
- Digital forensics and privacy
- Advised IT Director & CIO on NPS network, academic computing systems & supercomputer



2015–2016 — National Institute of Standards and Technology

- Information Access Division
- Big Data and Privacy (De-Identification)
- NITRD National Privacy Research Strategy
- Cybersecurity "High Assurance Domain" project



Affiliations with 11 US and 2 international colleges & universities.

Proven academic & corporate researcher.

Current and past affiliations with many universities:

- Student — Bryn Mawr College (1981-1983), MIT (1983-1987; 2002-2005), Columbia (1987-1988)
- Non-teaching payroll employee — Weitzmann Inst. (1985), Brown (1987), Harvard (2005-2006)
- Visiting researcher — University of Washington (1997), University of Auckland (2005)
- Faculty — Northeastern (2005), Harvard (2004-05), NPS (2006-14), George Mason (2015), Georgetown (2015-16)

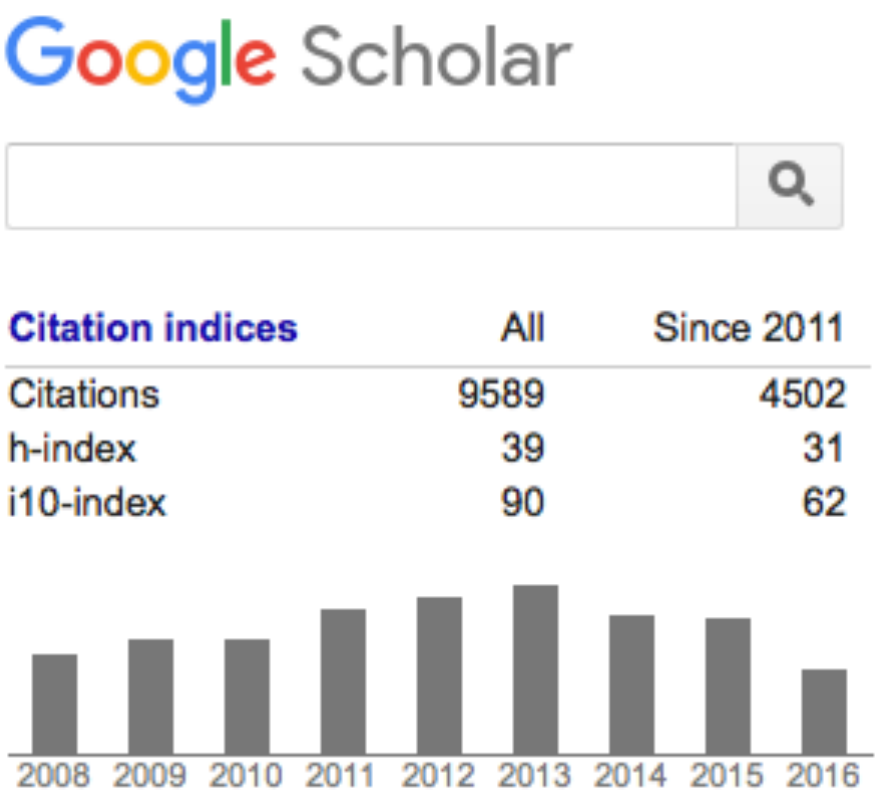


Established academic researcher:

- 22 refereed journal articles (1988-2016); 39 refereed conference papers (1998-2015)
- 2 PhD committees; 18 masters students; >45 program committees
- 3 conference chairs; 4 conference co-chairs; 1 associate editor (Computers & Security)
- ACM (Association for Computing Machinery) Fellow; member ACM US Public Policy Council

Established corporate researcher:

- 7 patents;
- 2 products (SBook, PhoneSweep) that successfully commercialized AI-based research



Experience with other federal agencies

Commerce — Employee for 2 years (2015-2016)

- June 29 Government Data De-Identification Stakeholder's Meeting; 105 registered attendees from 67 different agencies
- Census — Joint research on privacy issues · Privacy training for Federal Privacy Council

DOD — Employee for 8 years (2005-2015)

- Navy/Naval Postgraduate School — Taught courses; research
- DARPA — Performer on 2 projects; provided guidance on human subjects issues
- NSA (National Security Agency) — Taught courses; technology transfer
- DIA (Defense Intelligence Agency) — Technology transfer; embedded in an intelligence center; mentoring
- USMC (United States Marine Corps) — Performer, technology transfer

DHS (Department of Homeland Security) (2008-2014)

- Performer; technology transfer; source-selection

FBI (Federal Bureau of Investigation) (2007-2014)

- performer; technology transfer, teaching & mentoring

NSF

- Grant recipient; panels

Experience with legislative process and oversight committees

Testimony

- Senate Committee on Commerce, Science, and Transportation (2000)
Internet privacy
- Subcommittee on Privacy, Confidentiality & Security, National Committee on Vital and Health Statistics (2016)
De-Identification

Responding to oversight requests

- Prepared statements and reports for numerous "data calls"
- Responded to Freedom of Information Act (FOIA) requests

Volunteer work, Electronic Privacy Information Center


- In-depth discussions on technology with EPIC Director & advisory board
- Directed three technology migrations (web hosting; email service; Internet connection)

Deep commitment to diversity and equity.

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THE CHRISTIAN SCIENCE MONITOR

Tuesday, May 9, 1989



IDEAS

EDUCATION UNTAPPED HUMAN RESOURCE

Gender Gap on the Science Track

Because of stereotyping, girls don't receive the encouragement boys get to give science a serious try


By Simson L. Garfinkel
Special to The Christian Science Monitor
CAMBRIDGE, MASS.

PICTURE a second-grade class on a field trip to a science museum, poised before an exhibit on magnetism: The boys run up and play with the controls, while the girls remain in the back, watching.

This scene, repeated daily across the United States, is at the heart of a pressing educational problem, according to a growing number of scientists, educators, and government officials. In a world

States will decline 19 percent, according to the US Census Bureau. Although the population is expected to increase slowly after that, by the year 2010 one in every three 18-year-olds will be black or Hispanic, minorities that thus far have been largely excluded from studying science.

Last year, a congressionally mandated task force on Women, Minorities, and the Handicapped in Science and Technology concluded that if the US is to maintain its position as a world leader in science, more women and minority students must be attracted to the traditionally white, male fields of science and engineering.





My work shows the importance of reaching out to groups that have been historically marginalized.

I have experience with non-traditional students & scientists

✓

Tuesday, February 27, 1990

THE CHRISTIAN SCIENCE MONITOR

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First Wife's Role in Einstein's Work Debated

Researchers differ about the contribution Mileva Maric -Einstein made to major discoveries

By Simson L. Garfinkel
Staff writer of The Christian Science Monitor
NEW ORLEANS

ALBERT EINSTEIN sometimes helped his first wife do the household chores: "He felt sorry that after her housework was done, she had


"Certain aspects of his life have been largely neglected by male biographers," said Dr. Troemel-Ploetz, who is working in the United States with a research grant from the West German government. For example, she says, in the 1979 biography, "Albert Einstein: The Human Side - New Glimpses From His Archives," "there is not a single letter written

In the 41 letters from Einstein to Maric' that have been published, there are frequent references to "our research" and "our work." In one letter, Einstein wrote: "For the work on the Thomson effect I took refuge to still another method which has a certain similarity with yours . . . and which also presupposes your investigation.

awarded the 1921 Nobel Prize. Einstein left Maric' in 1914. She frequently had to take in boarders to buy food for herself and the couple's two children.

letters have survived. "Sources about women disappear," said Troemel-Ploetz. "It doesn't mean that they were intentionally destroyed: It is just negligence."

"True, only 10 of her letters to him are preserved, compared to 41 of his to her, but you could not pick 10 of his so devoid of discussions of physics," argued John



'How happy and proud I will be when the two of us together will

Two careers — science journalist & government academic

Committed to interdisciplinary work

Committed to scientific communication

Committed to diversity of all kinds