

PDC 98
Proceedings of the
Participatory Design Conference

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Welcome to PDC 98

the fifth biennial Participatory Design Conference

Broadening participation is the title, theme, and goal of the 1998 Participatory Design Conference. For this year's conference we paid special attention to the PDC tradition of stimulating an interdisciplinary discussion. In this volume you will find voices from architecture, health care, economics, theater, disability advocacy, as well as those from information technology and labor. Our choice of architect Michael Pyatok as our keynote speaker reflects our commitment to broadening participation; his work in affordable housing design and neighborhood revitalization has been based for many years on participatory methods. PD practitioners and researchers come from far-flung arenas but face similar challenges. For PDC 98 leading thinkers and doers in multiple fields come together for a constructive exchange of ideas and fresh perspectives for everyone.

PDC 98 continues as an excellent forum for cutting-edge discussion of Participatory Design in information technology. The papers in this volume are again from an international group of participants, this year from Sweden, Norway, the Netherlands, Denmark, Germany, Italy, the U.K., Scotland, Brazil, Canada, and the United States. As in the past, they offer a mix of theoretical perspectives and practical applications, several case studies and many good stories. Multiple session formats at the conference invite participation; paper sessions, panels, mini-workshops, full-day workshops and poster/artifact sessions provide diverse forums for discussion.

Underlying this and every PDC is a passionate commitment to shape technologies, conditions of work, and social institutions in humane and thoughtful ways. By involving users, workers, and community members in technological and work design, both processes and products can follow a deeply democratic ideal; people shaping the outcomes that affect them most. PD practitioners are at the forefront of championing this essential element of a democratic society, the importance of which knows no disciplinary boundaries. Collaborative approaches to work are constantly evolving, and there are as many strategies as there are settings. This volume celebrates the diverse approaches represented here while reaffirming the principles that motivate all of us.

As editors of this proceedings, we extend a big thank you to all of the people whose combined efforts make this conference possible. We thank the authors, committee chairs and organizers, committee members, volunteers, and all the people who attend PDC 98. Again, we appreciate the cooperation with the Association for Computing (ACM) and the Computer Supported Cooperative Work conference (CSCW 98) with whom PDC 98 is co-sponsoring the full-day workshops. Computer Professionals for Social Responsibility provides tremendous organizational support for this conference. We wish also to recognize the members of CPSR and our generous co-sponsors for making the conference a success.

Welcome to PDC 98!

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Computer Professionals for Social Responsibility

CPSR's Mission

CPSR is a public-interest alliance of computer scientists and others concerned about the impact of computer technology on society. We work to influence decisions regarding the development and use of computers because those decisions have far-reaching consequences and reflect our basic values and priorities.

As technical experts, CPSR members provide the public and policymakers with realistic assessments of the power, promise, and limitations of computer technology. As concerned citizens, we direct public attention to critical choices concerning the applications of computing and how those choices affect society.

Every project we undertake is based on five principles:

We foster and support public discussion of, and public responsibility for decisions involving the use of computers in systems critical to society.

We work to dispel popular myths about the infallibility of technological systems.

We challenge the assumption that technology alone can solve political and social problems.

We critically examine social and technical issues within the computer profession, both nationally and internationally.

We encourage the use of information technology to improve the quality of life.

CPSR is a democratically organized membership organization. Our accomplishments result from the active involvement of our members, supported by the CPSR staff and computer professionals across the country.

CPSR Projects

By sponsoring both national and local projects, CPSR serves as a catalyst for in-depth discussion and effective action in key areas. Some of CPSR's major projects have been:

The National Information Infrastructure

Civil Liberties and Privacy

Computers in the Workplace

Technology Policy and Human Needs

Reliability and Risk of Computer-Based Systems

In addition, CPSR's chapter-based projects and national working groups have tackled issues ranging from the implementation of Calling Number ID systems to the development of nanotechnology and virtual reality, from the use of computers in education to working conditions for computer professionals, from community networks to computer ethics.

Historical Highlights

- CPSR published the first papers and held the first public debates on the computing aspects of the Strategic Defense Initiative, or "Star Wars".
- CPSR members testified before a U.S. Senate subcommittee on the feasibility of SDI.
- CPSR/Boston produced an award-winning slide show and videotape called "Reliability and Risk: Computers and Nuclear War".
- CPSR members produced the first book for general audiences on computers in modern weapons systems
- CPSR's report on the FBI's proposed National Crime Information Center upgrade (NCIC 2000) was widely credited for the FBI's decision to drop a proposal to track individuals who had not been charged with any crime.
- CPSR co-produced a "Special Report on Computers and Elections" for the 1988 Presidential Campaign, highlighting the potential for errors in electronic vote-counting.

- CPSR filed lawsuits under the Freedom of Information Act to force the FBI and Secret Service to reveal whether they monitor computer bulletin boards and electronic mail.
- CPSR/Portland hosted a conference on Computers and the Environment.
- The CPSR Workplace Project organized the 1990 Participatory Design Conference.
- CPSR helped lead a successful grassroots campaign to convince the Lotus Development Corporation not to release their proposed Marketplace: Households product, which would have included data on 120 million Americans.
- CPSR /Berkeley organized a media campaign to register concern over the deadly role of computing technology in the Persian Gulf War.
- CPSR/Chicago helped organize the "Technology, Jobs, and Community" conference.
- CPSR participates in a broad coalition of public-interest organizations with concerns over the Telecom Reform Bill of 1996.
- CPSR is a co-plaintiff in the lawsuit ACLU vs. Reno that overturns the Communication Decency Act.
- CPSR holds its sixth DIAC conference in Seattle, ten years after the first one was held.
- CPSR launches a new program on Internet Governance and publishes an IETF draft "One Planet, One Net: Principles for an Internet Era."

Who can join CPSR?

CPSR welcomes everyone who uses or is concerned about the role of information technology in our society. CPSR is a democratically organized grass roots alliance. To become a member, just fill out the membership form attached as the last page of this volume, enclose a check, and mail it to CPSR, P.O. Box 717, Palo Alto, CA 94302.

Membership Benefits

As a member of CPSR, you are joining a nationwide network of concerned people who are committed to bringing a public interest perspective to all aspects of information technology. CPSR's work covers a wide variety of issues including the proposed National Information Infrastructure, privacy and freedom of information, the demilitarization of national technology policy, cryptography, participatory design approaches to system development, and more.

CPSR has a reputation for being on the forefront of issues pertaining to the impact of information technology on society, taking action to implement positive examples of the use of information technology such as local community networks as well as participating in regional and national policy discussions.

Other membership benefits include:

- Joining with other concerned people to affect policy-making at the local, regional, and national level.
- Access to an international network of people who can provide expertise and well-researched support for progressive positions concerning information technology policy.
- Access to on-line information and discussion groups on key topics concerning the socially responsible use of information technology.
- The chance to participate in local and national working groups on issues of particular interest to you.
- A quarterly newsletter containing in-depth analysis of major issues as well as updates on CPSR activities and action alerts.
- Invitations and discounts to CPSR events and publications.

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An honors graduate of Harvard University's and Pratt Institute's Schools of Architecture, Pyatok has been an architect and professor of architectural design for 31 years. Pyatok's practice serves non-profit organizations and private developers in building affordable housing, mixed-use developments and community facilities. Since opening his office in 1985, Pyatok has designed over 8,000 units of affordable housing for lower-income households, winning numerous local and national design awards. He has helped start two non-profit housing corporations and sat on the board of one for ten years as it produced over 700 units of housing in Oakland, California. He has been a Fulbright Scholar in Helsinki, Finland where he studied the housing policies of Scandinavia. Harvard University appointed him a Loeb Fellow in 1983 where he used the resources of the Business School and the Kennedy School for Public Policy to explore strategies for non-profits to develop decent and affordable housing in this age of shrinking public involvement. In 1995 he was elected to the College of Fellows of the AIA in recognition of his contribution to neighborhood planning and the design of affordable housing. Funded by the national AIA and the NEA, he has co-authored a book about design issues related to neighborhood planning and affordable housing for lower income families. Entitled *Good Neighbors: The Design of Affordable Family Housing*, it was published in 1996 by Images Press and is being distributed by McGraw Hill.

For thirty years he has been using participatory design methods to facilitate the involvement of lower income communities in their revitalization. Using three-dimensional modeling kits, role-playing and some gaming techniques he has helped many communities plan their futures and implement the design and construction of many new housing developments and community facilities.