



ACM US Public
Policy Council

Fiscal Year 2009 Annual Report of the US Public Policy Council of the ACM

For the Period July 1, 2008 – June 20, 2009

USACM OVERVIEW

USACM is the U.S. Public Policy Council of the Association for Computing Machinery (ACM). USACM members include leading computer scientists, engineers, and other professionals from industry, academia, and government.

USACM OPERATIONS AND GOVERNANCE

USACM operates through a transparent and democratic process to reach consensus on policy activities. Draft policy statements, position papers, and letters are usually posted to one of its subcommittees or to USACM Council for review and comment approval. In some cases positions are forwarded to the Executive Committee of the USACM Council (USACM-EC) for quick review and approval. The USACM Council conducts regular calls with the ACM Policy Office staff to update and coordinate activities. The calls are also an opportunity to bring issues and events to the attention of USACM staff as well as other USACM Council members. Through items discussed on these calls USACM staff can conduct policy research on issues identified by USACM Council and initiate contacts and meetings with relevant policymakers on a timely basis. Finally, the USACM Council typically meets in person once a year to review policy activities and determine priorities. ACM's Office of Public Policy in Washington, D.C., and ACM headquarters staff in New York support the work of USACM.

As of June 2009, USACM has six established subcommittees – Voting, Security and Privacy, Computing and the Law, Intellectual Property, Accessibility and Digital Government – to provide specialized focus on particular issues.

At the close of FY2009, the USACM-EC consisted of the following members:

- Eugene Spafford (USACM Chair, Purdue);
- Annie Antón (USACM Vice-Chair, North Carolina State University);
- Edward Felten (USACM Vice-Chair, Princeton);
- Harry Hochheiser (Accessibility Subcommittee Chair, Towson University);
- Jim Horning (SPARTA, Inc.);
- Barbara Simons (retired, former USACM Chair);
- Ollie Smoot (retired);
- Emil Volcheck (National Security Agency, SIG Representative);
- Stuart Feldman (ACM Past President/President's Designee, Google), *ex officio*;
- John White (ACM CEO), *ex officio*; and,
- Cameron Wilson (ACM Director of Public Policy), *ex officio*

The USACM Council consisted of the following members:

- Eugene Spafford;
- Annie Antón;
- Edward Felten;
- Bill Aspray, (University of Texas) At Large, term expires 12/31/09;
- Charles Brownstein (Former USACM Chair, Homeland Security Institute);

- Lorrie Cranor (Carnegie Mellon University) At Large, term expires 12/31/10;
- Jeremy Epstein (SRI International) At Large, term expires 12/31/09;
- Juan Gilbert (Clemson University) At Large, term expires 12/31/09;
- Andrew Grosso (Law Subcommittee Chair);
- Harry Hochheiser;
- Jim Horning, At Large, term expires 12/31/10;
- Paul Hyland (Intellectual Property Subcommittee Chair);
- Douglas W. Jones (Voting Subcommittee Chair);
- Jeanna Matthews (SIG Representative);
- David Robinson, (Open Government Subcommittee Chair);
- Stuart S. Shapiro (Security and Privacy Subcommittee Chair);
- Barbara Simons;
- Ollie Smoot, At Large, term expires 12/31/10;
- Emil Volcheck;
- Stuart Feldman, *ex officio*;
- Bobby Schnabel (Chair, Education Policy Committee), *ex officio*;
- John White, *ex officio*; and,
- Cameron Wilson, *ex officio*

Complete information about current USACM members is available at <http://www.acm.org/usacm/members.html>.

FY2009 OVERVIEW AND HIGHLIGHTS

This past fiscal year saw USACM make significant changes to its structure and how it develops policy positions. Besides interacting with policymakers in our typical areas of electronic voting, privacy, and security, USACM members testified before Congressional committees and helped develop principles on increasing the usability of government information online. Both volunteers and Policy Office staff continue to be approached for comment and participation on computing related policy concerns. As USACM moves forward under the Council structure, we expect to better leverage the experience and expertise of our members in contributing to policy discussions.

ACM's Policy Office and USACM work closely with the Computing Research Association (CRA) on issues that impact the computing field. Together the organizations represent the community on numerous issues and have joined in several letters to Congress. CRA's leadership and USACM also share close connections - four members serve(d) on both CRA's board and USACM, two of whom are on the USACM-EC (Antón and Spafford).

USACM's policy agenda is primarily organized around four themes: 1) Advancing the computing discipline, 2) balancing innovation and intellectual property protection, 3) protecting privacy in a technology-intensive society, and 4) advocating for secure and reliable computing systems. USACM's agenda is not limited to these four areas, however.

The sections that follow have more detail on USACM's FY2009 activities, achievements, and events:

Advancing the Computing Discipline

ACM Joins With Task Force Urging for Investments in Science Research and Education

ACM signed on a letter with the Task Force on the Future of American Innovation thanking congressional members for including investments in physical science and engineering research, scientific infrastructure projects, and math and science education in the American Recovery and Reinvestment Act of 2009. The Task Force believes the ARRA investments will create and preserve good jobs now and create a foundation for better, high-paying jobs in the future.

USACM Applauds American Recovery and Reinvestment Act

USACM hailed the Recovery Act's renewed commitment to science and technology innovation as a key driver of economic growth and competitiveness. A significant portion of the funding is dedicated to basic research and development for several key federal agencies and departments, as well as investments in education. USACM believes computer science will play a key role in innovation.

Balancing Innovation and Intellectual Property Protection

Texas Legislature References USACM Comments on Filtering

The Business and Industry Committee of the Texas House of Representatives issued a report on how schools might combat intellectual property theft on their networks. The report relied in part on a letter submitted by USACM to the U.S. Congress in April of 2008. The letter, signed by USACM Chair Eugene Spafford, and current Vice-Chair Edward Felten, helped the Committee recognize the problems associated with mandatory filters and technological solutions. Ultimately, the Committee recommended that the legislature pursue a policy of encouraging schools to educate their students on the ethics of digital piracy, which is consistent with USACM's position.

Protecting Privacy In a Technology-Intensive Society

USACM Sends Health IT Recommendations to Congress

USACM sent a letter to congressional members to express concerns about ensuring that privacy principles were addressed in any efforts to facilitate health information technology. USACM urged members follow recommended privacy guidelines, which include Minimization, Consent, Openness, Accuracy, Security and Accountability as they computerize health information records. These principles will help to ensure the resulting system serves the public's medical needs as well as preserves its privacy.

Advocating for Secure and Reliable Computing Systems

USACM-EC Member Speaks on Electronic Voting

Harry Hochheiser, a member of the USACM Executive Committee, spoke on “Voting: The Evolving Political and Technical Landscape” His remarks explored recent developments in voting technologies and regulations, from both policy and research perspectives.

USACM Members Participate in CFP Conference

USACM coordinated a panel to speak on voting and using the Internet at the Computers, Freedom and Privacy Conference (CFP). The panel discussion focused on two types of voting systems: voting kiosks and Internet transmission of absentee ballots. Overall there was a lot of agreement, with the exception of how far we can go safely.

DETAILED ACTIVITIES

The following is a more comprehensive and chronological listing of USACM activities for the year.

August 2008

USACM Member Appointed to Election Assistance Commission Board

USACM member and former ACM President, Barbara Simons was appointed by Senator Harry Reid (D-NV) to the Board of Advisors to the Election Assistance Commission (EAC). The board, one of two advisory boards to the EAC, consists of 37 members representing a number of different constituencies. Dr. Simons’ spot is one of four assigned to science and technology professionals. The Board advises the EAC on matters including the Voluntary Voting System Guidelines. The EAC was established by the Help America Vote Act of 2002 (HAVA) to assist in the administration of Federal elections.

USACM nominated Dr. Simons for the position along with three other members of USACM for the four science and technology slots on the board.

USACM-EC Member Spoke on Electronic Voting

Harry Hochheiser, Assistant Professor at Towson University and member of the USACM Executive Committee, spoke on “Voting: The Evolving Political and Technical Landscape.” His remarks were a part of a regular series of speakers hosted by the Washington, D.C. chapter of the Association for Computing Machinery. The talk explored recent developments in voting technologies and regulations, from both policy and research perspectives. Dr. Hochheiser has been involved in ACM’s study of Voter Registration Databases and in drafting USACM comments on proposed voting guidelines.

Policy Office Director joins with CRA Government Affairs Director in Science Policy Column

In the August edition of *Communications of the ACM*, Cameron Wilson, Director of Public Policy for ACM, and Peter Harsha, Director of Government Affairs for the Computing Research Association, wrote a column on the intersection of science, policy and politics. The column looked at what impacts

scientific and technical information have on the policy-making process. “Decisions on public policy are not made in the abstract based on the best technical information, they are made by policymakers balancing numerous interests from numerous constituencies. Balancing these interests is a political calculus, not a scientific one. In developing it, scientific information is sometimes pivotal, sometimes sits on the sidelines, and sometimes ends up as a mix where compromise may or may not embrace a technical truth. It is difficult to predict what factors will motivate specific policy debates because the political system is ever changing.”

October 2008

USACM Joins Science Organizations in Urging Quick Science Adviser Appointment

Joining over 180 other science, technology and medicine policy organizations, USACM endorsed a letter sent to both Senators Obama and McCain urging them to quickly appoint a science adviser once either man is elected President, and to elevate that position to Cabinet-level rank. The letter is available at:

http://www.aaas.org/news/releases/2008/media/1031letters/letter_science_advisor_obama.pdf

November 2008

USACM Members Comment on the 2008 Election

USACM members and ACM staff closely observed the 2008 election activities throughout the country and noted how the system performed and issues with electronic voting in several media articles and interviews, with an emphasis on voter registration database concerns.

USACM’s release following the elections can be found at:

<http://www.acm.org/press-room/news-releases-2008/evoting-election08/>

USACM member Barbara Simons was interviewed by O’Reilly Media about the election. They have a podcast and transcript of the interview available online at:

<http://broadcast.oreilly.com/print/34059.html>

Member Eugene Spafford was noted by the Associated Press and the Welland Tribune (Ontario, Canada) on voting machines, “The majority of them seem to be functioning OK, but there are trouble spots, not unexpected...the troubles largely stem from issues of volume, under training of personnel and, to some extent, inexperience or unanticipated problems.”

IT World and Grant Gross interviewed USACM member Alec Yasinsac, who even though saw the potential for trouble when voting jurisdictions switched voting systems suddenly, stated that he believed voting officials worked hard to minimize problems.

USACM Chair Concerned About Information Security Curricula

USACM Chair Eugene Spafford made predictions about the information security curriculum in American higher education for CSO Magazine. His comments can be read online at:

http://www.csoonline.com/article/463063/Gene_Spafford_on_IT_Security_Education

According to Spafford, information security, like most areas of information technology, lacks available students for the demanding market. Also, in the areas of cyber forensics and information, the curriculum has shifted away from some of the lower-level skills that are necessary to work in the field. This can pose a challenge for some employers seeking students with the right combination of skills. Unfortunately, these skills are not well integrated into existing computer science curricula and existing courses are not universally available.

Texas Legislature References USACM Comments on Filtering

The Business and Industry Committee of the Texas House of Representatives researched the challenges of having schools handle the digital copyright infringement on their own networks. The resulting report relied in part on a letter submitted by USACM to the U.S. Congress in April of 2008. The letter, signed by USACM Chair Eugene Spafford, and current Vice-Chair Edward Felten, helped the Committee recognize the problems associated with mandatory filters and technological solutions. Ultimately, the Committee recommended that the legislature pursue a policy of encouraging schools to educate their students on the ethics of digital piracy, which is consistent with USACM's position. The report is available at:

<http://www.house.state.tx.us/committees/reports/80interim/CommitteeonBusineandIndustry.pdf>

The letter submitted by USACM is available at:

http://usacm.acm.org/usacm/weblog/wp-content/USACM_Filtering_Final.pdf

December 2008

USACM Member Gives Presentation on Voting

USACM member Harry Hochheiser of Townson University gave a presentation to the Baltimore ACM Chapter on "Voting: The Evolving Political and Technical Landscape". The presentation reflected back on the 2008 election where some jurisdictions abandoned electronic voting machines in favor for paper ballots, while others plan to return to paper ballots in 2010 and others still have required paper trails. The talked explored current developments in voting technologies and regulations, from both policy and research perspectives.

January 2009

USACM Recommends Privacy Principles to Congress for Health IT

USACM sent a letter to congressional members recommending that privacy principles be addressed in any efforts to facilitate health information technology. USACM urged members to look to the ACM Privacy Policy Statement as they move forward with computerizing health information records. The statement outlines general principles for when developing or using information collected from individuals. These guidelines, consistent with generally accepted Fair Information Practices, include Minimization, Consent, Openness, Accuracy, Security and Accountability. These principles will help to ensure the resulting system serves the public's medical needs as well as preserves its privacy.

February 2009

ACM Joins With Task Force Urging Investments in Science Research and Education

ACM signed on to a letter with the Task Force on the Future of American Innovation thanking congressional members for including investments in physical science and engineering research, scientific infrastructure projects, and math and science education in the American Recovery and Reinvestment Act of 2009. The Task Force is a diverse group of industry, university and scientific society partners that seek to boost basic research funding. They believed the ARRA investments would create and preserve good jobs now and create a foundation for better, high-paying jobs in the future.

The Task Force urgently recommended that Congress support the House-passed funding levels for the Nation Science Foundation and Department of Energy Office of Science, as well as the investments for the National Institute of Standards and Technology (NIST) core laboratory programs, NIST facilities, and construction grants.

USACM Issues E-Government Recommendations

In response to efforts by Congress to ensure transparency in the American Recovery and Reinvestment Act (ARRA), USACM released a statement with recommendations on making government open and accessible to all Americans. The statement was to promote policy makers to use these recommendations while constructing federal websites, such as the Recovery.gov site instituted through the ARRA.

Some of the recommendations for government information are:

- Data published by the government should be in formats and approaches that promote analysis and reuse of that data.
- Data republished by the government that has been received or stored in a machine-readable format (such as online regulatory filings) should preserve the machine-readability of that data.
- Information should be posted so as to also be accessible to citizens with limitations and disabilities.

- Citizens should be able to download complete datasets of regulatory, legislative or other information, or appropriately chosen subsets of that information, when it is published by government.

The Press Release and full details on USACM's recommendations can be read at:

<http://www.acm.org/press-room/news-releases/pdfs/open-government.pdf>

USACM Calls for Making Recovery.gov Web 2.0 Friendly

The American Recovery and Reinvestment Act required the government to create the Recovery.gov website to house all of the grant data that would be generated from spending under the act. USACM sent a letter calling for the website to include the ability to download complete data sets in machine-readable form. The letter builds on the principles from USACM's open-government recommendations into the requirements specified by the legislation.

USACM's letter to Congress can be read at:

http://usacm.acm.org/usacm/weblog/wp-content/arra_v2.pdf

USACM Applauds American Recovery and Reinvestment Act

USACM hailed the renewed commitment to science and technology innovation in the just-passed American Recovery and Reinvestment Act as a key driver of economic growth and competitiveness. A significant portion of the funding was dedicated to basic research and development for several key federal agencies and departments, as well as investments in education. USACM believes computer science will play a key role in innovation. USACM Chair Eugene H. Spafford noted that, "The computing community can cite concrete examples of how advances in information technology lead to breakthroughs that enable productivity growth and even create whole new industries. This dynamic can lead to an economy running at full capacity, enabling more efficient allocation of goods and services, which, in turn, produces higher quality goods and services."

USACM pointed to increased investment for the National Science Foundation (NSF), the U.S. Department of Energy (DOE) Office of Science, the Advanced Research Project Agency-Energy (ARPA-E), the National Institute of Standards and Technology (NIST), the National Institutes of Health (NIH), and the National Aeronautics and Space Administration (NASA) as recipients of funding that will directly support innovation.

March 2009

USACM Seeks Details on Recovery.Gov to Maximize Public Information

The Recovery.gov site, mandated by Congress through American Recovery and Reinvestment Act as a way to track federal spending, had unclear guidance as to whether the website would allow users to download complete copies of machine readable data published on the site as USACM recommended. To help clarify these issues USACM sent two letters (one to the Administration and one to Congress) with the following questions:

1. What is the timeline for developing the systems that will capture the data required by the act?
2. How long after these systems are deployed will the data be made available in machine-readable form?
3. Will users be able to download all the data made available on this site, or will only part of it be available for download?
4. What are the data elements that will be made available through Recovery.gov either through an Application Programming Interface or other mechanism?

The two letters can be read at:

http://usacm.acm.org/usacm/PDF/recovery_gov_administration_final.pdf

http://usacm.acm.org/usacm/PDF/recovery_gov_follow_up_final.pdf

USACM Nominates Members to Advisory Committees Supporting Health Information Technology Development

USACM submitted letters in support of members Peter Neumann and Julie Earp being nominated for positions in two advisory committees – the Health IT Standards Committee and the Health IT Policy Committee - responsible for helping the country develop and implement standards for health information technology. These committees were established as part of the American Recovery and Reinvestment Act. USACM's nominees were not appointed to the committee.

April 2009

USACM Briefs Congress Regarding Digital Government Issues

David Robinson, USACM's Digital Government Subcommittee Chair and Cameron Wilson, Director of ACM's Policy Office, met with Congressional staffers to educate them on USACM's open government recommendations. The meetings with House Oversight and Government Reform, Senate Homeland Security and Government Affairs, and Representative Honda's staff highlighted the need to make government more accessible by placing it in machine-readable formats on sites like recovery.gov.

David Robinson later testified during a field hearing by the House Oversight and Government Reform committee with recommendations for strengthening recovery.gov's transparency.

May 2009

USACM Chair Nominates Smith for the FCC Technological Advisory Council

USACM Chair Eugene Spafford nominated Professor Jonathan M. Smith for a position on the FCC Technological Advisory Council. Mr. Smith is an Olga and Alberico Professor of Engineering and Applied Science representing research and education in computer communications, computer networking, and computer network security. In addition, Smith has a broad expertise across an entirety of communications issues with experience in the industry (Bell Laboratories and Bellcore), academia (U Penn), and government (DARPA). Dr. Smith's nomination is still pending with the FCC.

June 2009

USACM Elevated to Council Status within ACM

The ACM Executive Council elevated its U.S. Public Policy Committee - USACM - to council status. This change reflects ACM's increasing attention to public policy issues. The elevation to council status plans to streamline the decision-making processes of USACM both internally and within ACM. As a council, USACM has established subcommittees to work on issue areas of consistent and continued interest: voting, privacy and security, computing and the law, intellectual property, accessibility and digital government. The Education Policy Committee will continue as an independent entity from the new US Public Policy Council.

USACM Comments on President's Cybersecurity Review

USACM issued a press release outlining its comments on the Obama Administration's cybersecurity review, a 60-day review of federal cybersecurity activity headed by Melissa Hathaway. USACM Chair Eugene Spafford noted that while "the President hit many of the right notes in his remarks" the report missed "any emphasis on funding, tools or support for better law enforcement" as well as any discussion of research.

USACM's comments can be read in full at:

http://usacm.acm.org/PDF/Cybersecurity_Policy_Review_USACM_comments.pdf

USACM Members Participate in CFP Conference

USACM coordinated a panel to speak on voting and using the Internet at the Computers, Freedom and Privacy Conference (CFP). The panel was chaired by USACM's Vice-Chair, Ed Felten of Princeton. Other speakers included: Amy Bjelland and Craig Stender from the State of Arizona, Susan Dzeduszucka-Suinat of the Overseas Vote Foundation, Avi Rubin from Johns Hopkins University, and Alec Yasinsac from the University of South Alabama. The panel discussion focused on two types of voting systems: voting kiosks and Internet transmission of absentee ballots. None of the panelists supported an entirely web-based voting system that would allow voting from any web browser. Instead,

the emphasis was on more modest steps, aimed specifically at overseas voters. Overall there was a lot of agreement, with the exception of how far we can go safely.

USACM Members Testify Before Congress on Cybersecurity and Behavioral Advertising

Fred Schnieder of Cornell University and Seymour Goodman of Georgia Tech testified before the Research and Science Education subcommittee of the House Science and Technology Committee on June 10. The focus of this hearing was on social components of cybersecurity, though other cybersecurity topics were covered. On June 18, USACM Vice-Chair Edward Felten testified before the Subcommittee on Commerce, Trade and Consumer Protection of the House Energy and Commerce Committee. His testimony concerned the mechanics of generating online behavioral profiles of individual consumers, which set the stage for the policy issues of concern to the subcommittee.