

Revisiting My Campaign Statement

Two years ago I entered the race for ACM President with my campaign statement. In the second-to-last President's Letter of my term, I thought I would revisit what I said we would do and reflect on what we did.

WHAT I SAID WE WOULD DO

The first sentence of my campaign statement [11a] read:

"My first resolve as President would be to preserve and promote programs we love, such as the ACM Digital Library, journals, conferences, USACM, Queue, and the Professional Development Centre (PDC)."

I'm happy to report these programs are in fine shape in 2006.

- The Digital Library is the crown jewel of ACM. It now supports 50,000 downloads per day and the DL is in half of university libraries in the world.
- Under the leadership of new publication co-chairs Ronald Boisvert and Mary Jane Irwin, ACM now has over 40 magazines and journals. Lowering the cost of starting and running journals means small markets are affordable.
- ACM conferences maintain their reputation for quality, and Donna Baglio of ACM headquarters helps oversee the 150 conferences and workshops ACM sponsors every year.
- USACM has a new executive director, Cameron Wilson, and his first year at the helm has been eventful. Although USACM participated in many policy discussions, I'm personally proudest of the role we played behind the scenes in helping the

U.S. President decide to propose doubling the budget for the physical sciences in the 2006 State of the Union Address [11e].

- *Queue* has a new editor, Charlene O'Hanlon, and our most recent survey of ACM members showed a 20% jump in the recognition of *Queue*.
- We refurbished the Professional Development Centre. It now has almost 900 new online course and 1,000 online books, including almost all from the popular IT publisher O'Reilly.

My statement then proposed three new initiatives:

1. *"Reach out to new professionals. Fewer new IT professionals join ACM. To recruit them we need local, engaging, ACM-branded events such as a half-day course on a hot topic, ideally as part of an existing IT event such as Java Meetup Days. ACM would partially subsidize these meetings and offer discounts to members. Attendees would discuss new topics, network, and learn about new ACM benefits like Queue and the PDC."*

We ended up starting a new ACM board to focus on IT Professions, chaired by past ACM president Steve Bourne [11e]. A new board is a big deal for ACM; it previously had only four: Education Board, Membership Services Board, Publications Board, and the Special Interest Group Governing Board. The goal of the new Professions Board is to focus on products and services that support and enhance the professional and technical development of practicing

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computing professionals including engineers, architects, IT specialists, and managers. It is responsible for developing programs that support the professional needs of ACM members as well as promoting computing as a profession. The board expects to involve ACM in its existing meetings.

2. *“Reach out to high schools via ACM advisors. Most high school computing teachers are struggling to keep up; therefore, we should grow programs like Java workshops to help guide them (JETT). ACM members could help, including student members who are natural matches to their alma maters. They could offer support, give lectures, and review assignments...”*

We ended up chartering a new association—the Computer Science Teachers Association—to help pre-college teaching of computer science [11d]. High school teacher Robert Cutler is chair and Chris Stephenson is executive director. CSTA has over 4,000 members at last count.

3. *“Attract ‘big idea’ papers to conferences. ACM program committees are swamped with submissions, and so quantitatively evaluated papers are the likeliest to be accepted given an 80% rejection rate. But papers with big ideas and little quantitative evaluation once led in important new directions, and we need to make sure they will have a place at ACM conferences...”*

Many are concerned about the health of the reviewing practices and content of ACM conferences [11c]. After a few discussions at the SIG Governing Board meeting, we decided to form an ad hoc committee jointly between ACM and the IEEE Computer Society to capture the challenges to conferences today and the best practices on how to cope with those challenges. Mark Hill chairs this committee. The plan is to capture the lessons learned from many conferences and the best practices as a Web page, including initiatives like “Big Idea” sessions.

WHAT ELSE WE DID

While I assumed other issues would arise, in retrospect, Vice President Stuart Feldman, Secretary/Treasurer Laura Hill, and I were an activist administration. Here are four major efforts:

4. **Publicity.** Prompted by an email message about the lack of news coverage of Alan Kay’s Turing Award, I asked the reporters I knew about how we might

make ACM and its activities more visible in the media. The answer was surprisingly simple: hire a good public relations firm and listen to its advice.

It worked. In addition to getting good news coverage for the next two efforts on offshoring and research funding, the news of Vint Cerf’s and Bob Kahn’s Turing Award was widely reported. It started with an article and photo on the front page of the business section of the *New York Times* [5]. While not every winner will receive equal coverage, we have certainly learned how to promote ACM’s activities and efforts in the press.

5. **Offshoring.** Before I was elected, Executive Director John White thought ACM should study the impact of outsourcing on the software industry from an international perspective. Almost all prior studies have been done by advocacy organizations, and there was a great deal of confusion about the size of the impact of offshoring and how to cope with the challenges and opportunities. In the absence of facts, folklore about offshoring was reducing the popularity of our field as a major at universities in the first world. Although the birthing process was much longer than planned, the quality and thoroughness of the report exceeded our expectations [3].

From my perspective, given the impact on our field by the myths about offshoring, one of the most important aspects of this effort was to get news coverage of the results. Once again, our growing expertise in publicity paid off. After an initial article—again in the *New York Times* [8]—the report was covered by many news outlets around the world [6]. Amazingly, the *New York Times* even wrote an editorial on the topic; it’s certainly the first time ACM was mentioned on their editorial page [10].

Although the report covers many topics, the media focused on the increase of jobs in first-world countries despite the increase in popularity of offshoring to third-world countries. Getting the truth out about offshoring is exactly what I hoped would happen, because the myths were steering entering college students away from majoring in our field.

For those of you who didn’t see the report, the figures here help back up that perspective. Figure 1 shows the Occupational Employment Statistics (OES) from the U.S. Bureau of Labor Statistics.

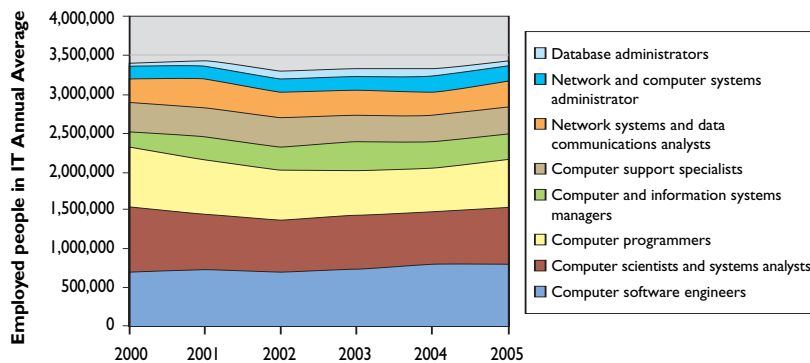


Figure 1. Employment data from the U.S. Bureau of Labor Statistics.

Despite the U.S. being the leader in offshoring, there are more people employed in software jobs in the U.S. than there were during the peak of the dot-com era. Figure 2 is from the Dice job listings service. The President of Dice contacted former ACM President Maria Klawe because he was concerned whether there are enough people studying IT to fill the increasing job demand.

Although everyone involved deserves our praise, I'd like to personally thank William Aspray, Frank Mayadas, and Moshe Vardi for their heroic efforts in completing and publicizing the report.

6. Research Funding. I became concerned about the cutbacks in funding for IT research in first-world countries, and I felt it was the responsibility of the ACM President to speak the truth to power. So I did: in these pages [11b, 11f]; in newspaper articles [9]; in an Op-Ed piece in *Science* with Ed Lazowska [7]; and in a cover article for *Time* magazine [12].

Remarkably, the U.S. administration listened to the concerns of many scientists and engineers. On January 31, President Bush proposed a doubling of funding of physical sciences and engineering in the U.S. over the next 10 years in his State of the Union Address. Although there are still obstacles to overcome

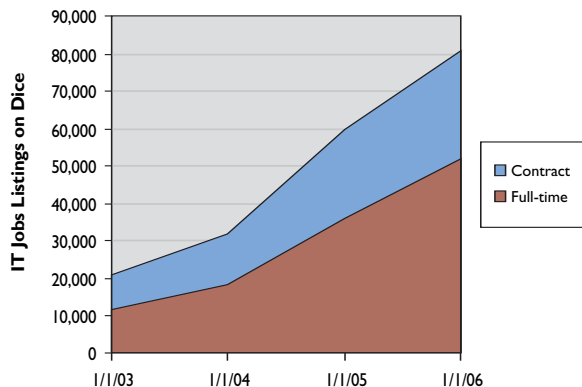


Figure 2. Job listing statistics from Dice.com.

in the U.S. Congress, other countries are already reacting positively to the President's proposal by starting their own initiatives.

While we were not alone in this call to arms, our field played a vital role. IT was the poster child of economic return for research investment, with the "tire track" diagram reproduced on these pages [11b] demonstrating how research investment led to 19 multibillion-dollar IT industries. IT leaders, including Craig Barrett of Intel and John Chambers of Cisco, made the case personally and effectively to the administration [9b].

Immediately after testifying to Congress about DARPA's recent funding policies, computer scientist and National Academy of Engineering President Bill Wulf commissioned a quick report using his President's funds on the state of research. Drafts of this influential report [4] became the blueprint of the administration's science initiative [2].

7. Engaging the Membership. One of the first things I was told was that ACM had a difficult time communicating with members.

Since ACM is in the publishing and conference business, I figured we had solutions. Hence, I restarted the "President's Letter" column, with this one being my 18th communiqué, and I gave presidential welcome talks at conferences, including International Symposium on Computer Architecture, SIGGRAPH, SIGMOD, and Supercomputing (SC06). The Favorite Books program—with electronic ballots and a wiki for comments—also engaged ACM members [11g]. To honor contributions of ACM members, we

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As I near the end of my administration and reflect upon the last two years, I'm surprised about how many things worked out. Like parenting, it was a lot of work but it was more than compensated by a lot of rewards. I'm glad I got a chance to serve, and look forward to serving as Past President.

started two new membership grades: Senior Member and Distinguished Scientist/Engineer [1]. Finally, for those of us who hate paying bills, we now offer life-time memberships.

WRAPPING UP THE PRESIDENCY


As I near the end of my administration and reflect upon the last two years, I'm surprised about how many things worked out. We were able to grow ACM membership for the third year in a row, its in strong financial position, and the staff and volunteer leadership is excellent. Like parenting, it was a lot of work but it was more than compensated by a lot of rewards. I'm glad I got a chance to serve, and look forward to serving as Past President.

I clearly benefited from Stu Feldman and Laura Hill being elected my colleagues, and I'd like to thank them publicly for serving with me the last two years.

I'm also indebted to ACM's Board chairs: Andrew McGettrick and Eric Roberts, Education Board; Robert Walker, SGB Board; Terry Coatta, Membership Services Board; and Ronald Boisvert and Mary Jane Irwin, Publications Board.

I spent even more time with the headquarters staff. My hat is off to CEO John White, COO Pat Ryan, and the rest of the staff with whom I've worked: Donna Baglio, Diane Crawford, Wayne Graves, Russell Harris, Lillian Israel, Mark Mandelbaum, Rosemary McGuinness, Charlene O'Hanlon, and Cameron Wilson.

ACM operates with a considerably smaller staff than similar organizations, but it punches way above its weight class, which reflects well on the effectiveness of the people and the organization.

Next month will be my farewell address, and I'll use it to share my advice on future directions for ACM. 

REFERENCES

1. ACM. Call for nominations for advanced member grades in the ACM. *Commun. ACM* 49, 3 (Mar. 2006) 25–26.
2. American Competitiveness Initiative. U.S. White House; www.whitehouse.gov/stateoftheunion/2006/aci/.
3. Aspray, W., Mayadas, F., and Vardi, M.Y, Eds. *Globalization and Offshoring of Software—A Report of the ACM Job Migration Task Force*. ACM, New York, NY (Feb. 2006).
4. Augustine, N.R. *Rising Above The Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. National Academies Press (2006)
5. Hafner, K. Laurels for giving the Internet its language. *New York Times* (Feb.16, 2005).
6. *Infoworld*. Report offers tips to protect your job from offshoring (Feb. 24, 2006).
7. Lazowska, E. and Patterson, D. An endless frontier postponed. *Science* (May 6, 2005).
8. Lohr, S. Study plays down export of computer jobs. *New York Times* (Feb. 23, 2006).
9. Markoff, J.
 - a. Pentagon redirects its research dollars. *New York Times* (Apr. 2, 2005).
 - b. Behind Bush's new stress on science, lobbying by Republican executives. *New York Times* (Feb. 2, 2006).
10. *New York Times*. Computing error. Editorial (Mar. 1, 2006).
11. Patterson, D.A. *Commun. ACM*. ACM, New York, NY.
 - a. 2004 ACM Elections, President, Statement (May 2004), 80–89.
 - b. President's Letter: The state of funding for new initiatives in computer science and engineering. (Apr. 2005), 21–25.
 - c. President's Letter: Does ACM support matter to conferences and journals (Aug. 2005), 29–30.
 - d. President's Letter: Restoring the popularity of computer science. (Sept. 2005), 25–28.
 - e. President's Letter: The new PDC boasts 1,000 courses, O'Reilly books, and CS classics. (Oct. 2005), 15–16.
 - f. President's Letter: Robots in the desert—A research parable for our times. (Dec. 2005), 31–35.
 - g. President's Letter: Reviving your favorite CS books. (Mar. 2006), 31.
12. *Time Magazine*. Is America flunking science? (Feb. 13, 2006).

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