Spitting Into The Wind

By Michael Wing

William Wulf, President of the National Academy of Engineering, urged ICSE 99 conference attendees to get involved with information technology policy. Until now technologists have believed in a form of technology-determinism: that changes in technology will produce changes in society. He believes that while technology enables changes in society, other forces will determine how society absorbs and uses new technology.

Because these issues are deeply rooted in culture, Wulf opined that getting technology people involved feels like “spitting into the wind.” His primary goal was to “make us uncomfortable” with the hands-off, “we are succeeding in spite of Washington” attitude that many in industry show. His main argument was that if knowledgeable members of the IT industry don’t help make policy decisions, then lawyers with less understanding will make decisions on their own.

Technology is moving so fast that normal means in society cannot cope. The WWW is erasing many place-based assumptions about privacy, decency, taxes, licensing, and national security. Many regulations are based on traditional assumptions of economics, where scarcity creates value, rather than the new economics, where abundance creates value. These changes will profoundly affect our lives.

In closing, Dr. Wulf challenged everyone in the audience to get involved with policy. Specifically, he urged everyone to spend some time as an NSF or DARPA project manager, or in government; to serve in professional societies, and to talk with their political representatives. When noticed that he addressed a U. S. audience, Wulf pointed out that everyone around the world faces the same challenges.

So you are a student coming to ICSE?

By David Notkin

Over the years, I’ve brought many of my students to conferences like ICSE. A number of years ago, I wrote a small note to them about their responsibilities when attending a conference, and I thought it might be of some small value still. I’ve edited it only slightly, but I’ve left it in the form of a note to my students:

"Why am I bringing you all down to the conference? In part, I just want the University of Washington to have a good showing, since it’s good for the department. But more importantly, it’s good for you (1) to see the people who’ve written papers you’ve read, (2) to see what’s current in software engineering research, (3) to start to build relationships with other researchers in the field, (4) to tell people what you’re doing and to find out what they are doing, and (5) to find out that you’re at least as smart and good as many of those researchers.

"So, you should work hard to attend lots of sessions and read lots of the papers. But it’s unlikely that you’ll go to every session: some will be genuinely uninteresting to you. In addition, the most important part of a conference is "schmoozing", standing in hallways talking to colleagues (satisfying most or all of the items in the previous category). You’ll see me and lots of others doing this.

"It’s scary trying to meet these "famous" people. I’ll try and introduce you when I can, but I’ll be pretty busy. So it’s OK (actually, it’s more than just OK) to be a little (or a lot) pushy. If you see people you want to listen to having a conversation, feel free to move on up to them and try to listen (unless for some reason it seems like it’s a personal conversation and is thus inappropriate). Sometimes (Continued on page 2)
An Interview with Jeff Kramer

Q. What do you think is "special/significant" about ICSE '99?
A. One of our main aims was to ensure that ICSE provided something for everyone, while at the same time maintaining high standards of quality and originality. For this reason we were keen to provide a broad spectrum of events, including technical paper and case study presentations, panel discussions, formal research demonstrations, posters and informal software tool demonstrations, workshops, tutorials, industry presentations and exhibits. In addition, we are proud to have an excellent set of the invited keynote speakers. Hopefully we have managed to cater for all tastes.

Q. What was the most difficult thing you had to overcome to make ICSE '99 a success?
A. The sheer volume of submissions to and interest in ICSE '99 has been both inspiring and overwhelming! For instance, we had a record number of 260 paper and 34 case study submissions. This required a huge effort on our part in handling the papers, in assigning reviewers, in managing the PC meeting and subsequent activities. The PC members were outstanding in providing expert and careful reviews of all of these papers, and in selecting only the highest quality papers for the conference.

Q. What was the most surprising thing you learned about while serving as Program Coordinators for ICSE (e.g., a lesson learned)?
A. I am not sure that it was surprising, but being a PC Chair did provide us with a wonderful opportunity to gain an overview of both the Software Engineering area and those active in the area.

Q. What advice do you have for next year's Program Coordinators?
A. Brace yourselves! Nothing prepares you for the number of issues and items that you will have to deal with. Make sure that you keep a sense of proportion and humor in the face of adversity! On the other hand, the help and encouragement that we received from so many people was inspiring. It really was wonderful that so many people were happy to volunteer to support our activities.

Q. Is there anything else you want to add?
A. I look forward to joining that elite group of ICSE's ex-Program Chairs. We hope that all will enjoy and benefit from ICSE.

Q. What is different about ICSE '99 than previous ICSEs?
A. It is the first ICSE to be held at an airport?! Seriously, it is probably its breadth.

Q. What advice do you have for this year's attendees?
A. Try something new! ICSE provides a wonderful opportunity to meet one's colleagues and to catch up on the latest development in one's area of interest. But it is also an opportunity to find out about other areas. We encourage all attendees to be adventurous, to attend some new events.

... ensure that ICSE provided something for everyone, while at the same time maintaining high standards of quality and originality...

Q. How many papers/proposals were submitted ICSE?
A. See previous details. It is clear that ICSE continues to be the main flagship conference for the software engineering community, both in academia and industry.

Q. What was the most surprising thing you learned about while serving as Program Coordinators for ICSE (e.g., a lesson learned)?
A. I am not sure that it was surprising, but being a PC Chair did provide us with a wonderful opportunity to gain an overview of both the Software Engineering area and those active in the area.

So you are a student coming to ICSE?

(Continued from page 1)

they'll acknowledge you, sometimes they won't. But it's worth trying to get involved in these conversations when possible. (Even listening by itself can be valuable.) Of course, the best way to get involved is to ask a question: it flattens people and makes them respond to you. And you learn something.

"Trying to have meals with folks is a really good way to meet them. Some people you already know probably know a couple of people from other places, so if they set something up, it'd be nice to try to bring another UW student or two along. (For women students, there may be a Sisters lunch one day. It'll probably be marked on a bulletin board. Go if you can and want.)

"Hang out some with each other. But don't do this exclusively, since you can do that in Seattle, but you can't schmooze with the others here. De-briefing with each other on sessions, papers, interactions with others, etc. is of value, though, and you should do this with each other on occasion.

"I'll be busy, but please feel free to track me down and tell me how things are going or what you've been doing.

"That's more than enough. I'm really, really happy you're coming to the conference. I hope it's enjoyable and professionally satisfying."
Are We Doing It Right?

By Michael Walsh

We all know what we are supposed to do. First we go to college and get a degree, perhaps in Computer Science but maybe in engineering, some science or a computer-oriented business degree. Then afterwards we develop software using all of the latest software engineering methods and tools. We also should pursue higher education to obtain higher degrees, credentials and above all knowledge.

Is this the path to follow? There is an alternate path described in the May 16, 1999 Sunday issue of the Los Angeles Times in the article “Gold Rush Spirit and Ambition Endure” by Terry McDermott. He describes the path taken by Pete Oliver who had indifferent grades in high school, worked at a Shell station, and hung around the edges of the “rock” scene. He had been interested in computers since he was a kid in the 70’s and his science-teacher father would take him down to the computer lab at UC Berklely and let him punch cards on the teletype.

Money kept him out of college, but he also believed the world was moving too quickly for a college degree to be worth the investment. He compared four years of college to what he might learn in half the time at a vocational school and took the vocational school path where he learned rudimentary programming. He went to work at Sprint and was unimpressed by the ability of the company’s high-end programmers to write software. He worked for a number of companies and finally became disgusted at his last employer because he believed programmers did not get proper access to the company’s stock. He resigned and started his own company. He wrote communications software and his company prospered. He rented office space and hired a few other misfits who played guitar and wrote code.

He now runs a company called Metrix, which has a software program, called NeuralStar that is designed to control telephone networks. He won a large contract from the Defense Department. His company just received its first outside financing that required setting a value on his company that was $28 m.

If you want more details please get the Sunday LA Times and read it, as there is much more detail in the article. I tried to quote the minimum needed to demonstrate that the academic training path is not the only one that can be taken. Of course, in the software industry some of our examples are Harvard dropout Bill Gates and Apple co-founder Steve Wozniak who graduated with a degree in Electrical Engineering after, not before, making his millions. Commercial software has exploded, and a lot of it is being written by people who not only don’t have degrees but many of whom have never heard of ACM.

There is another side. Bill Gates publicly urges people to complete their education, and not try to follow his career path. Steve Wozniak’s urge to go back and get his engineering degree demonstrates a belief and respect for education. Also, when we view commercial software today the term “code bloat” and frequent unreliable behavior come quickly to mind. Perhaps they could use a good dose of real software engineering.

SIGSOFT Meeting Summary

By Davor Cubranic

The SIGSOFT meeting Wednesday evening revolved largely around the licensing of software engineers, but raised more questions than answers.

The meeting opened with chair David Notkin’s report on the recent ACM Council meeting where he gave presentation on SIGSOFT. In the same meeting, the Council also considered issues in licensing of software engineers and formed the position that while ACM believes in the importance of software quality and pursuing it in various ways (such as building the core body of knowledge), it believes that licensing software engineers is premature and ineffective at this time. Furthermore, when asked, ACM may provide advice to licensing organizations, but will not endorse such activities.

Following SIGSOFT’s vice-chair’s report on its conference activity in 1999 and Notkin’s remarks on the future ICSE’s, the meeting went into a discussion period. The only topic was again licensing: not only whether it is necessary, or even possible, but also whether ACM and SIGSOFT should get involved, if only to oppose the process. The danger, it was pointed out, was that otherwise engineers, in particular electrical, will take over the agenda and tell computer scientists what to study in their curriculums and do in their careers. In all, numerous conflicting opinions were voiced and no clear consensus emerged. Any formulations of SIGSOFT policy remained for the Executive Committee’s meeting later in the evening. Also, stay tuned for WOW’s Friday issue, which will include a more detailed article on the licensing of software engineers. Or attend the BOF at 8:30 tonight on this subject in the Atlanta/Boston room, led by Don Bagert.
The Phantom Menace vs. ICSE ‘99

By Hal Hart

The long anticipated popularity contest between ICSE ’99 and the Star Wars prequel has turned into a rout. Despite Wednesday being ICSE ’99’s 4th day and just the opening day of “Phantom Menace” (movie showings started at 12:01 a.m. in many theaters), by 8 a.m. the movie’s attendance and revenues had left ICSE 99 in the dust.

Doing business at the rate of $6M gross revenues per hour nation-wide, this showdown was almost over before it started. However, we are pleased to report that between the hours of 8 a.m. and 8:30 a.m. this morning, our new report that between the hours of 8 a.m. and 8:30 a.m. this morning, our new revenues had left ICSE 99 in the dust.

By Hal Hart

The TCSE meeting began with a brief overview of the current state of the council and ended with a free ranging discussion about professionalism, regional organizations, and the web page.

The TCSE will soon have elections for 3 at-large members. Openings exist for Treasurer, Software Management and Maintenance Committee Chair, Technology Transfer Task Force Chair, and Software Engineering Professionalism Task Force Chair. The TCSE could also use help with Secretary, Vice Chair for Conferences, web development and maintenance, newsletter sections, and the Asia / Pacific and Europe regional organizations. If you would like to help, contact Gene at g.hoffnagle@computer.org.

In the discussion on professionalism, Gene described many reasons why the right time is now. Other audience members stated their doubts. One audience member said that a bill in Texas would undo recent changes in the rules for engineering, and explicitly permit Microsoft to use the word engineer.

There are 1100 TCSE members in Asia / Pacific, and more than 2000 members in Europe. Regional organizations for Asia / Pacific and Europe are being established to better serve these members.

ICSE ’99 Industry Sponsors

We thank our Gold sponsors Telecordia (a SAIC company)—previously Bellcore, EDS, and TRW; and our Silver sponsor Northrop Grumman. Their able representatives are Telecordia’s Richard De Mille, EDS’s Joyce Fitzpatrick, TRW’s Hal Hart and Northrop Grumman’s Leitha Purcell. The support of these corporate sponsors provided significant help to the ACM and IEEE organizations presenting ICSE99.

LA Picks

For the view (esp. at sunset) and decent, moderately priced ($15-30) Japanese food, visit the “Yamashiro” restaurant in Hollywood hills behind the magic castle (1999 North Sycamore Avenue). -D. R.

ICSE ’99 Window on the World

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Davor Cubranic (UBC, CAN)

Window on the World

Why is this man smiling?

Inquiring minds want to know

By Will Tracz

What happened to Andre van der Hoek’s front teeth?

Your choices are:
1. He got into a fight with his advisor
2. He was in jail with Mike Tyson
3. He was rudely separated from his bicycle

FYI

The past issues of Window on the World WOW ’99 are available. You can pick them up on request from the ICSE Registration Area.

Editor

Wanted:
ACM Software Engineering Notes is looking for workshop, symposium, and conference summaries to put in future issues.

Contact Will.Tracz@acm.org for more information.

Quote of the Day

Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius—and a lot of courage—to move in the opposite direction.

A. Einstein.