

## Grab the Chance to Work on the Leading Edge

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ach year I make a point to impress on my students the importance of standards to their career. I really want to cultivate in these young engineers a strong desire to participate in standards, because I myself have benefited so much from the experience.

Through my standards work, I have had a chance to travel and meet some of the sharpest engineers in the world. So I tell my students that by far the most important reason for an engineer to participate in standards is personal growth. The opportunities for networking and learning are endless.

The classic reason to attend standards meetings is to represent your organization when its technology is directly involved. But standards-setting is not simply about winning battles; it is about building consensus. To thrive in this environment, an engineer must be able to argue for a position on the basis of technical merit alone.

Even if your organization is not involved in the standards at hand, attending and participating in standards meetings is an excellent way to track emerging technologies. When I attended Posix meetings, I would spend a great deal of time outside the meetings talking about technology and future trends.

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The possibilities for career growth through involvement in standards are endless.

With the information I learned at each meeting, I was able to come back to my job with new perspectives on the technical problems I was facing. At times, my staff thought I had a crystal ball on the future, though I always told them I was just a lucky guesser.

Another benefit of participation in standards is achieving a more global perspective. Engineers from all over the world participate in standards-setting. Joining others in the work of forging an international consensus is an excellent way to develop a global awareness. And there may even be a chance to travel internationally.

To be frank, the cost of standards attendance is significant. Michigan State University spent about \$8,000 a year so that I could attend Posix. But the value to my career at MSU has been immeasurable. Without ever having to change jobs, I've been able to maintain career growth.

## TO FIND OUT MORE

To find out more about how to get involved, start at the IEEE Web site, http://www.standards.ieee.org. Or explore the American National Standards Institute (http://www.ansi.org), the Internet Engineering Task Force (http://www.ietf.org), and the International Standards Organization (http://www.iso.org) sites.

Note that Web pages devoted to a working group are designed for use by the working group, not necessarily for the casual surfer. Poke around for the meeting announcements. If you have a question, don't hesitate to send an e-mail to the chair. Chairs are always glad to have new people attending the meetings. Some larger groups—IEEE 802 and IETF, for example—even offer orientation sessions.

## **TIPS FOR SUCCESS**

Standards meeting are not like conferences. Unless you get involved, you won't learn and you won't meet or interact with anyone. Unless you have some role and some work to do, the meetings will become extremely boring. Here are a few tips to build your interest.

First, volunteer to take notes or minutes. The secretary role is my favorite. You don't have to fully understand what's going on, and taking minutes forces you to learn at least some of the material.

Volunteer to review material, such as draft documents. Even if you are starting out, your input is valuable to these groups. These draft documents are supposed to be written so that an engineer in the field can understand them. If you can't understand them, there is a good chance the material is not written well.

Finally, acquire some understanding in the topic area before you go to the meeting. Don't expect to be offered a tutorial. Conversations at standards meetings are narrowly defined and very deep.

tandards groups often find themselves working close to the edge of known technology. To arrive there, you need to have a strong focus. If the first group you attend is not working on something that interests you, move on.

But if you are willing to get involved, the networking, learning, and mentoring opportunities are endless. And the travel is not bad either. ❖