



## Profiles of Electrical Engineers and Computer Scientists



**William Schmidt**

**Principal Engineer/Scientist  
Silicon Graphics, Inc.  
Mountain View, CA**

### Education:

B.S. - Mechanical Engineering, University of California at Berkeley  
M.S. - Mechanical Engineering, University of California at Berkeley

### Job Description:

Principal Scientist in the area of electronics, serving as a corporate resource providing direction and expertise in the areas of chip level packaging and electronic interconnect.

### Advice to Students:

"Flexibility is important because engineering, and particularly engineering in industry, is a whole series of compromises."

### Video Transcript:

"To me, the college process isn't, doesn't give you a skill set. A college process, the university process teaches you how to think and teaches you how to learn so that your career becomes a lifelong learning process."

### Interview:

William Schmidt of Silicon Graphics believes that adaptability and flexibility are key to a successful engineering career. To cultivate these qualities, he advises students to "pay attention to the fundamentals" and get as broad a background as possible, taking English and humanities courses and developing their social skills. His being named principal scientist at Silicon Graphics is due to his broad background. Schmidt originally trained as a mechanical engineer and over time was exposed to electronics. "In my particular case, I paid a lot of attention to fundamentals and a broad background. And that's allowed me to get into an area [in which], oddly enough, most of the work I do is electrical."

Students need to keep in mind that what their education gives them is the ability to learn. "You don't know ... how technology is going to change in a twenty, thirty, forty year career. But you have to have the ability to adapt which means your philosophy [has to be] that you have the capability and the willingness to learn." Schmidt explains that, in the computer industry, every project is totally "new and completely different. So, in essence, it's like a Ph.D. thesis. The

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advantage you have working in the industry is that it's a collaborative effort. If you're a student, you have to do it all yourself. So you learn by doing just like doctoral candidates do."

Flexibility is important because "engineering, and particularly engineering in industry, is a whole series of compromises." Schmidt points out that "even a very good idea sometimes is not the best implementation, is not the most expedient one, is not the most cost effective one, and, therefore, you have to be willing to compromise that idea."

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