



# Sloan Career Cornerstone Center

## Profiles of Computer Scientists



**Paul Krzyzanowski**

**Principal Engineer  
Lucent Technologies  
Murray Hill, NJ**

### **Education:**

B.S. - Electrical Engineering, Cooper Union  
B.S. - Computer Science, New York University  
M.S. - Computer Science, Columbia University

### **Job Description:**

Principal Engineer, specializing in creating ventures and commercializing technology from concept to market. He is also a visiting assistant professor at Rutgers University, teaching operating systems design and distributed systems design.

### **Advice to Students:**

One skill that Krzyzanowski believes is essential for engineers is the ability to write well.

### **Video Transcript 1:**

"We also have people who, as undergraduates, studied things like Philosophy. Somehow they also seem to have a very interesting outlook on how to build things and how user interfaces should work. These days, I would think Graphic Design is good a thing as any if you're interested in constructing user interfaces or having a strong presence on the web."

### **Interview:**

Paul Krzyzanowski works at Bell Labs and teaches at Rutgers University. His dual roles in the worlds of business and academia give him a unique perspective on the needs of future engineers. He advises, "Unless you're really pressed for getting a job after your undergraduate degree, you should study something you like and maybe go to graduate school to perfect or to fill in some gaps in, say, computer science or electrical engineering."

Experience has taught Krzyzanowski that an engineer need not confine himself to his field in order to be good at it. "I find that people with a background in Physics tend to make wonderful computer scientists, often better computer scientists than people with a degree in computer science. We also have people who, as undergraduates, studied things like Philosophy. Somehow, they also seem to have a very interesting outlook on how to build things and how

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user interfaces should work." He also suggests Graphic Design as a possible major for those interested in user interfaces or the Web.

One skill that Krzyzanowski believes is essential for engineers is the ability to write well. "It astonishes me how incredibly poorly some [graduate students and seniors] write, and it's something that's really worth spending time on. Read a lot to find out what good writing is. Write a lot, and get peers to review it. If you want to contribute to the field, you're going to have to write about it, and, if you're not going to write well, people are not going to be very receptive."

There are two aspects of the world of work for which students should be prepared. One is the need to continue learning throughout their careers. Krzyzanowski explains that you can't "just finish school and resign yourself to watching I Love Lucy episodes in the evening and doing your work during the day, and that's it. You really have to stay on top of things, and that's getting really hard to do because there's just so much going on." In addition, he warns students to be prepared for the human element in the workplace. "I think, if they read Dilbert comics, they have a pretty good idea of what's out there in the real world. There's a lot of senseless insanity, and, if you're lucky and you get good management in the real world, good management hopefully will protect you from a lot of it."

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