

# Software Copyright and Role Models

Our words, ideas, and behavior profoundly influence our children and students to do good and not so good when using technology.



**W**hen I was teenager, I knew I was supposed to have role models, but I didn't know I already was one. I certainly wasn't aware of the magnitude of the effect even a small gesture could have—like choosing whether to use some

copied software. Such an effect can snowball, for good and for ill, and probably happens all the time, though we may never know it. But once in a while it stares you in the face. This story is about one of those times.

The first time I was asked to use illegally copied software as part of my work responsibilities was 1983. Not surprising, because in 1983 copying and sharing software was common, just as copying music was common in the mid-1990s. Personal computers were new, and most members of the general public did not yet understand what it meant to violate copyright.

I was 17, working as a junior counselor at the summer camp I had been attending for years. Computers were a new camp activity that year, and we had a roomful of shiny new Apple IIs. Along with the hardware, I was given a shoebox full of floppies with handwritten labels. This was to be our software.

A red flag went up in my mind; these copies did not look legitimate. My high school computer teacher, Mr. Moran, had drilled it into our heads that copying software was illegal and wrong. So when I saw the hand-labeled disks, I went to the camp director, Lou, to explain that copying software was wrong, and we couldn't use the disks to teach the campers.

I didn't record the conversation, but thinking back

on it I was probably pretty self-righteous, in typical teenage fashion. Lou was not amused. He had, after all, just shelled out for a roomful of computers. Spending more for software was not on his agenda. I remember telling him: As an individual, you can do what you want, but as an institution, we need to do things correctly and set a good example for the kids. The conversation got heated. I insisted we could not use the copied disks. Lou called me "holier than thou" and stomped off.

These days I teach a college class to undergraduates called "Computers, Society, and Professionalism" at Georgia Tech where we discuss ethical theories like utilitarianism and deontology, applying them to situations you might encounter as a computer professional. I give my camp experience as a homework assignment, asking: What would you do and why? After the homework is handed in, I tell them the real story.

About a week after my argument with Lou, one legal copy of maybe two or three different programming environments arrived at the camp. Lou must have ordered them, though he never told me so directly. We would technically need a license for each machine, not just one for the whole lab. But I decided to call it a compromise and use the one legal copy on all our computers. You could stop the story here, but this is where it gets interesting.

A few weeks later, one of the younger kids in the lab, David (age 12), asked me if I would play some of the (copied) games he had. We sometimes opened the lab in the evenings for games and free play. I opened up one particular evening just so David and I could play his games. I remember thinking about the argu-

ment with Lou and so felt justified in my decision to go ahead and play David's games. David offered to make me copies of some of them, and I said sure.

Actually, I may have copied them all. I was hurt and angry; Lou had belittled my ethical concerns, as well as me. Fine. If copying software isn't so bad, I might as well get a few fun computer games myself. David begged me every evening of the next few days to play games. I said yes once or twice more, but mostly I had other things to do. It was my time off after all.

About a week later, David's parents arrived abruptly to pick him up and take him home. It turned out that after I said I wouldn't play games with him, he broke open the lock to the lab's door and snuck in to play games by himself. The camp summarily expelled him, called his parents, and sent him home. I never got a chance to talk with him about it; he was just gone.

About 10 years later I got an unexpected phone call. The voice on the line said, "Hey, it's me." I said I was sorry but didn't recognize the voice; who is this? He repeated "It's me; don't you remember me?" He dropped a few clues about who it was, but I was stumped. "Why don't you just tell me?," I said. He answered, "How could you not remember me. You of all people. You were there when it all started."

I asked if I could think about it and call him back; was there a number where I could reach him? He hesitated, then said yes. He gave me a number and said, "But when you call back, it may sound like something it's not." I was puzzled.

I made dinner, did the dishes, and mulled it over. Then it dawned on me; it was David. How could I possibly recognize him? I knew him briefly more than 10 years earlier; his voice had changed. I called the number he'd given me and got voice mail for a company. David had been phone phreaking, cracking into a company's PBX to make free long-distance calls. I left a message on the company voice mail for him but never heard back.

This story is ultimately about snowballing ethical lapses. Lou's lapse was momentary. Faced with inconvenient news delivered in a tactless fashion, he grumbled briefly, got a good night's sleep, then woke up the next morning and did the right thing (or something approaching it). My own ethical lapse was a bit bigger:

I copied a few computer games and played them with an impressionable child. David's behavior magnified that lapse.

David's story often makes me think of James. When I was a master's student in the Interactive Cinema group at the MIT Media Lab, I hired him (he was an undergraduate computer science major) to do some coding for me. He was tall and quiet, and I found it difficult to have a conversation with him. I think I had him writing device drivers. He did exactly what he was told and what was expected of him. After graduation, he got a programming job doing something that sounded pretty dry to me; it might have been database work. I do remember telling him he was talented and suggested he might find something media-related more fun in the long term. He shrugged. He never said much.

James worked for me only two terms, and I hardly remember him among the long list of bright MIT undergrads I supervised at one time or another. It took me another six years to finish my Ph.D.

About two years after graduation, I stopped by to say hi. As I was walking down the hall toward the Interactive Cinema lab, a tall figure greeted me with a huge grin and a hug, "Amy!" It was James.

He excitedly talked at me for 10 minutes—probably more words than I'd heard from him before altogether. After a couple of years doing some rather dull programming work, he thought back on his undergraduate project working with me and realized it was indeed a lot more interesting than database work. He was now a graduate student in the Media Lab. He even had my old desk.

I wonder how many Davids and Jameses each of us has—people we have influenced more profoundly, for good or for ill, than our brief interactions with them would seem to merit. I wouldn't know about David if he hadn't called. I'm glad he did.

If the real David is reading this, please call again. I remember you, and I'm sorry. **C**

---

AMY S. BRUCKMAN (asb@cc.gatech.edu) is an associate professor in the School of Interactive Computing at the Georgia Institute of Technology, Atlanta, GA.

---

© 2007 ACM 0001-0782/07/0800 \$5.00