



The Critical Voice

by [Frank Liechtenstein](#)

Are you tired of trying to revolutionize enterprise software engineering by writing yet another Java package that will never make it into IBM's "best practices on producing bloated crap?" Have you finally realized that German hip-hop music is more likely to give rise to the new age of seamless communication than your work on the semantic web? Then this is for you.

The *next big thing*[™] in computer science is interdisciplinary work on electronic art. I realized that a month ago, when my last research grant wasn't extended. Who would have thought that drunken-sailor chess wouldn't take off? Anyway, I was invited to join a funded research project on "mixed media exploration of the struggle of modern man," run by some interdisciplinary research center of ours. The topic sounded interesting—the word "funded" even more so. So I went along for the project's first seminar, which was, let's say, a *new* experience.

The meeting was held in a tree house. "So, this is the University Center for Interdisciplinary Research?" "Yes, did you have trouble finding it?" "No, the bears and wolves were so kind as to show me the way." The chairman was twelve years old. (I understand he had graduated from a distance learning program.)

The project team seemed glad to have a computer scientist among them. Apparently they were quite fond of literature as well and asked me to use my computer science skills to build the death machine described in Kafka's "In the Penal Colony." "Well, current e-voting systems are sort of like that, but death machines aren't really a hot area of research in computer science, just yet."

But finally came my opportunity to present my "programming languages on ice revue,"

which is, if I may say so myself, quite ingenious. It involves Microsoft Developer Studio CDs lying around in the arena. The protagonist is a big snake in an orange pair of working overalls that skates around in a circle picking up a few CDs, but leaving most of them untouched. That character, of course, symbolizes Python's broken garbage collector. I went on to explain the journey of the hero through a jungle of parentheses standing for LISP and its nonexistent syntax and many other adventures, but the listeners found the idea lacking in artistic authenticity.

Then I suggested that we base a novel on a computer-related nightmare that has haunted me for a while now. It is set in a distant future in which I have (accidentally) managed to leave university. I lead a successful software company specializing in divinity information systems, which will, of course, be the hottest and most profitable branch of management information systems in the future. Santa Claus comes into my office and wants me to write a piece of software automating Christmas. "Where would we get all the data determining the good/bad judgment of children?" "Oh, I've been using the British CCTV system for quite a while now. It's almost as accurate as the data I used to get from God, but much more exhaustive. Yet, I'd like you to do some cross-indexing with God's book of life anyway." When I ask him what database God uses, Santa tells me that the book of life is kept entirely in Excel. At that point, I always wake up screaming.

While I was telling the others about these ideas for the book, one of them was trying to set fire to the chair I was sitting on, which seemed to cause the others quite a bit of amusement. "A street performance! We'll burn a computer scientist in public!" Everyone seemed to agree it was a good idea, which made me feel a little uncomfortable and also made me, well... run.

When I came back into town, I decided to do some fieldwork and took a camera into an art museum. Then I took a microphone into some concerts and recitals. I trained a statistical pattern classifier on the paintings and on the music. That allowed me to automatically identify paintings that look the way Beethoven sounds and musical pieces that sound like what Picasso's art looks like. Based on the data, I compiled a reference work, which is about to appear as *The Art Critic's Dictionary of Inappropriate Analogies*.

Now, if that's not interdisciplinary, I don't know what is. And, as we all know, the fact that I've managed to write it up and get it published means that I can't possibly be wrong. Electronic art is indeed the future of computer science.

Biography

Frank Liechtenstein (frank.liechtenstein@ieee.org) received an MSc in applied information technology at the Andreas Hofer University Innsbruck and a PhD in XML-related studies at the International Institute of Technology in Brussels, where he is currently employed as a postdoctoral research assistant.