

# Gordon Bell

**W**hen Chester Gordon Bell was recovering from a near-fatal heart attack that occurred during a 1983 vacation in Snowmass, Colo., his doctor constantly monitored Bell's neurological functions. "Who is the president of the U.S.?" the doctor queried Bell after the brilliant computer engineer emerged from a day-long coma. Bell, so apolitical that he had never even voted, replied, "I don't remember, and it really doesn't matter."

To those who knew him, this signaled that Bell's brain was indeed intact. Bell's brain also told him that it was time to leave Digital Equipment Corp., where he had guided the creation of virtually every important computer system the company sold, including the best-selling PDP-11 and VAX series.

In the nine years since his departure from DEC, Bell has not slowed his pace; he has simply aimed a shotgun blast of energy and talent at the industry, spending time on various development projects and corporate boards and in advisory roles.

MY FOCUS HAS always been on products, but now it's more broad than it's ever been before. I like to get down in the details. You can only contribute to things if you really understand the technology and what all the constraints are.

When I consider my greatest accomplishments, certainly the VAX and then the VAX environment are at the top of the list. To me, the importance of VAX was the overall vision. IBM's computers all sat in a glass room. In the VAX environment, we were putting these computers everywhere, fully distributing them using Ethernet and all the DEC networking.

I don't mind being linked to the VAX. It's the most important thing I've done in that it touched more people than anything else. Given what I'm doing now, I'm unlikely to have anything else that far-reaching.

On the other hand, there are many accomplishments that rate highly in my career.

I set up the computing directorate at the National Science Foundation and co-authored the High Performance Computing and Communications Initiative. I was a founder of the Computer Museum, which is likely to outlive all the organizations I've worked with. [My wife] Gwen made that work.

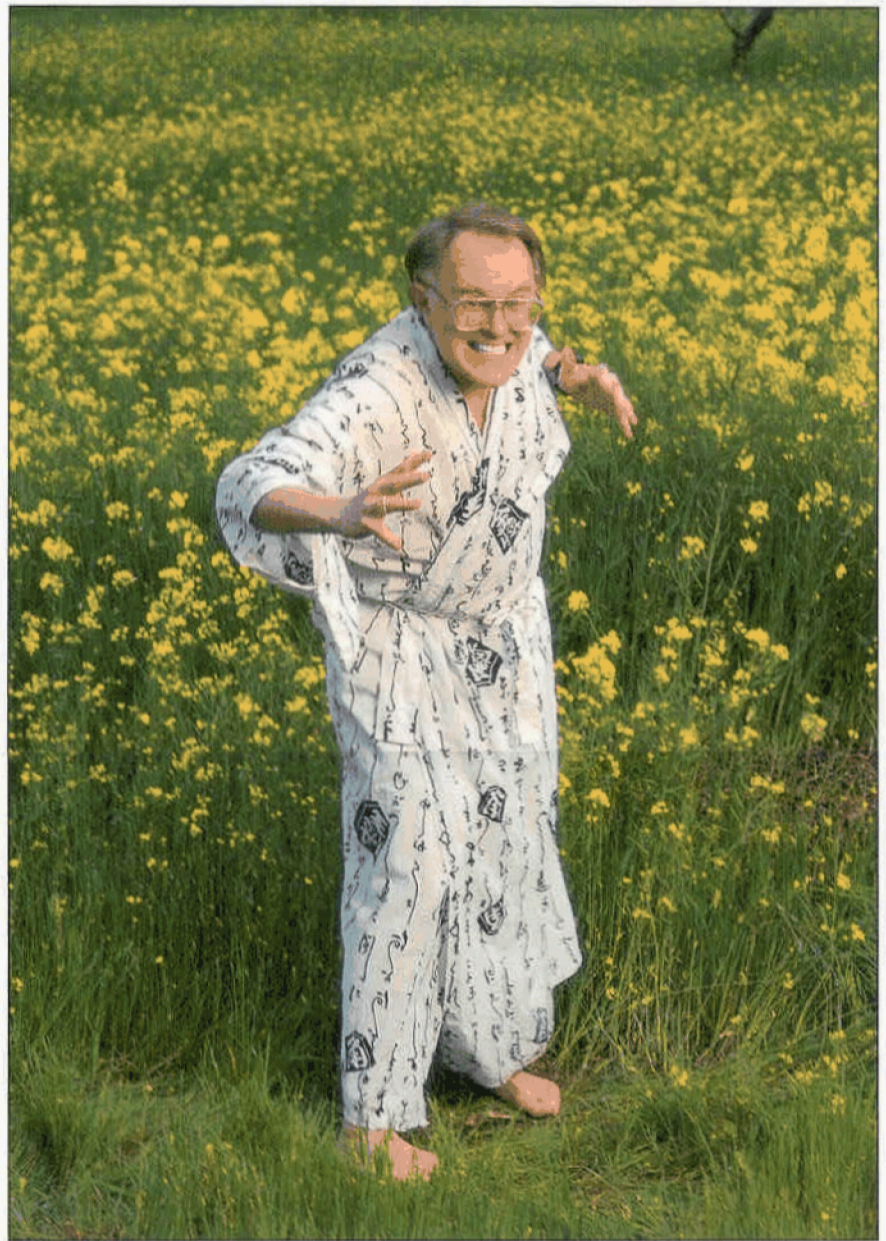
I am currently working with Microsoft on several projects that are likely to be as important as VAX, and I've been involved in the formation and growth of a number of start-ups such as Mips, Wavetracer, Wolfsort and Chronologic. I will always be measured against VAX, however. People say, "You did VAX. Now what are you doing?"

In a funny way, I have always been my own harshest critic. It's become a matter of adjusting my level of expectations of what I should do and understanding what the trade-offs are. Do I want to give up any of these things I enjoy to try to get that second big hit?

I've also had the opportunity to mentor and support a long list of creative people such as Henry Burkhardt, founder of Kendall Square Research, Dick Clayton at Thinking Machines, Dave Cutler at Microsoft, Dave Nelson at Fluent Machines, Jeff Kalb at Maspar. I respect really bright people. That is one of my flaws. I have often bought a sales story from someone who is very bright without understanding his flaws.

I see Dave Cutler, the man who created VMS, every time I go to Seattle. He is working on Microsoft NT, which I think is going to be very far-reaching. It's going to grab the rug out from under Unix. I'm head of Microsoft's technical advisory board and consulting with them on these two key products.

I loved managing engineering at Digital, which is one thing I rarely get any credit for.



One of the things I'm happiest about now is the Gordon Bell Prize for Parallelism that I give each year. It's my personal gift of \$3,000 to \$5,000 a year to people who get the most out of large computers.

I was out at Los Alamos at a dinner. One of the guys who won the first prize came up to me all excited and said, "You've totally changed my life. Nothing like that ever happened. Winning that prize just totally changed our project." That felt really good.

My father was probably my greatest influence. He had an appliance store and a contracting business and did repair work. I was working as an electrician from the time I was about five or six. He retired when I went to MIT. He was a mentor and all that. I learned intuitively about handling people and customers. My mother was a school teacher — intellectual, inquisitive and, at 91, is very active mentally today. Both parents were straightforward, positive, nonjudgmental and good teachers.

I, on the other hand, can be very judgmental. My view of the industry is a good example. The thing that 99% of the computer industry doesn't understand yet is that technology is destroy-

ing the industry. In 10 years, you'll see 99% of the hardware and software systems sold through what are fundamentally retail stores.

Then there's the intermediate job, which for DEC, IBM, Unisys and HP is being systems integrators. We've got all this stuff coming out; now how do we put it all together? I don't see that as a long-lived phenomenon because the world can't stand that much adhocism in computers.

Twenty-five years from now ... the computer disappears. Computers will be exactly like telephones. They are probably going to be communicating all the time so that no matter where I am, they are going to be attached to the network. I would hope by the year 2000 there is this big [networking] infrastructure, giving us arbitrary bandwidth on a pay-as-you-go basis.

I tend to be optimistic. So what I think of as happening in 10 years, I automatically double it. In projecting, I'm usually off by a factor of two. Somebody once said, "He's never wrong about the future, but he does tend to be wrong about how long it takes."

*Interview by Glenn Rifkin, a freelance writer based in Sudbury, Mass.*