

Technological advances are transforming the lives of deaf people  
and allowing them to function effortlessly in the mainstream.

# THEY'RE BREAKING

BY LOU ANN WALKER

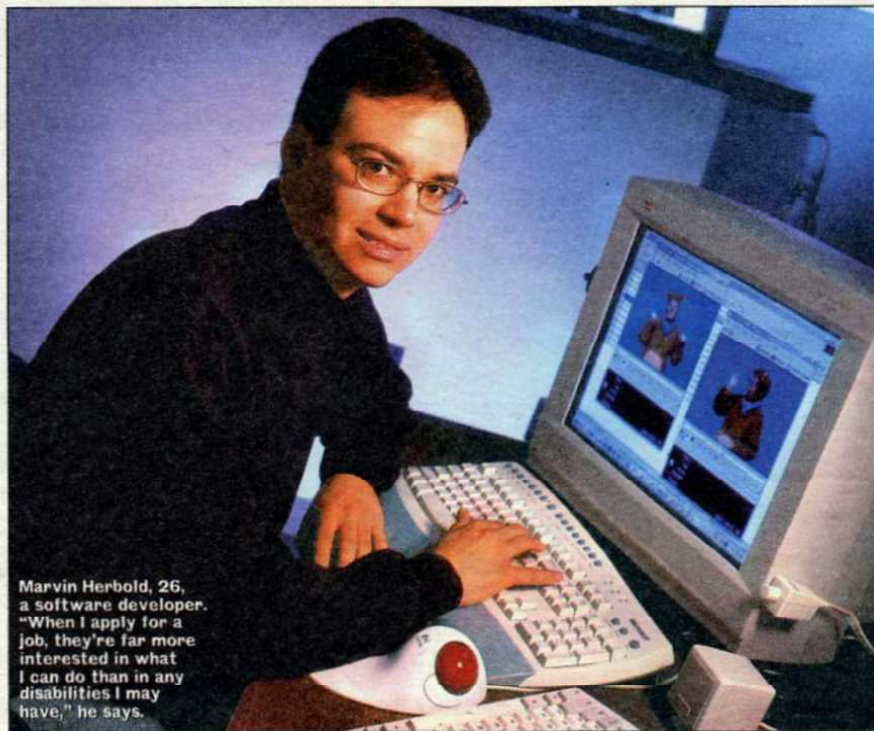
**M**ARVIN HERBOLD OF Gaithersburg, Md., wanted a job in the computer game industry after college, so he e-mailed a résumé to Bethesda Softworks. The company asked him to write a simple computer program depicting a 3-D cube. Herbold went further. His 3-D program showed an entire chessboard and pieces. Impressed, Bethesda sent back an e-mail asking him to come for an interview. Herbold e-mailed to let the interviewer know he was deaf.

"Not a problem," was the reply. After the interview, he was hired on the spot. "They were far more interested in what I could do," says Herbold, now 26, "than any disabilities I may have had."

As recently as a decade ago, things were far more difficult for deaf people looking for employment. Few dared apply for white-collar jobs, unless they were in the "deaf job ghetto"—a handful of lowly government positions—or teaching deaf children.

Today, not only is technology opening up employment opportunities, it also has changed the ways deaf people socialize, receive entertainment, communicate with the hearing world and plan their futures.

I've seen it firsthand, in my own family. My mother and father are deaf, as



Marvin Herbold, 26, a software developer. "When I apply for a job, they're far more interested in what I can do than in any disabilities I may have," he says.

were my aunt and uncle, and I signed even before I spoke. Not long ago, I went to a senior citizens' luncheon for deaf people in Indianapolis. As hands flew, I noticed something quite surprising about the conversations I was seeing

among my parents' friends. These older people were wired! "Did you get my e-mail?" "When I was surfing the Web, I found a great new site..." This was not the deaf world I knew growing up.

About 22 million Americans—8.6 per-

cent—have some hearing loss. Of those, 552,000 are profoundly deaf, which means they can't hear or understand speech. Traditionally, deaf people were relegated to trade jobs, such as printing. My father, for example, was a newspaper Linotype operator. My mother was trained in keypunch.

The 1990 Americans with Disabilities Act, which outlawed discriminatory practices against the disabled, gave deaf people the legislative muscle to make headway as never before. A new "can-do" attitude and sense of pride soon emerged. Then, as the 1990s saw a virtual explosion of technological advances, deaf people finally had the tools to fully enter the mainstream.

I was aware of these changes as I talked with some of the men and women who are using technology in their day-to-day lives. As a reporter, I have never

## MILESTONES IN TECHNOLOGY FOR THE DEAF

**1892**

The first electrical hearing aid, which weighs several pounds, is invented.



**1964**

The teletypewriter, or TTY, which enables deaf people to call each other and type conversations, is invented by Robert Weitbrecht, who is deaf.

**1972**

The first television show featuring captioning—Julia Child's *The French Chef*—is broadcast on PBS.

**1985**

The FDA approves cochlear implants.



**1990s and Beyond**

All new televisions 13 inches or larger sold in the U.S. are required by the FCC to have decoding chips, which allow deaf people to view programs with captions.

New vibrating pagers are developed that provide deaf people with easy, on-the-go communication.



Computer technology—including laptops, e-mail and the Internet—gives deaf people a level playing field with the hearing world in job opportunities and social communication.

Advances include real-time captioning (spoken words typed simultaneously on a screen); video-relay interpreting (deaf and hearing people speak via a remote video interpreter); and signing avatars (onscreen figures who sign words spoken into a microphone).

