

newsday.com/business/ny-bzcov285779862jul28,0,4033185.story

Newsday.com

LI companies struggle to fill high-tech jobs

BY CARRIE MASON-DRAFFEN

carrie.mason-draffen@newsday.com

July 28, 2008

For at least two years, Barbara Viola, who owns Viotech Solutions, a high-tech staffing and consulting firm in Farmingdale, has found the hunt for qualified applicants difficult.

"It started about two years ago, and it is getting harder every day," she said.

Viola said it took eight months to fill a client's request for a network analyst with supervisory skills and experience in the Linux operating system, a Microsoft competitor. That contrasts with some searches at Viotech that take as little as a day, she said.

Overall, companies are increasingly seeking candidates with specialized skills, Viola said, and that means the right people are hard to find, if at all.

"It's extremely frustrating," she said.

Hers is a familiar lament among local companies. Long Island, along with the rest of the country, is experiencing a severe shortage of high-tech workers amid explosive demand for them. The shortages are traceable to a perfect storm that began in the first months of 2000, when the dot-com bubble burst and the industry saw subsequent massive layoffs and outsourcing, followed by the Sept. 11 terror attacks.

"The perception out there was that the jobs weren't there," said Pearl Kamer, chief economist for the Long Island Association.

Between the layoffs and people who left the field because of heightened fears about job insecurity, the number of high-tech workers dropped dramatically. Nationally, for example, the ranks of computer software engineers dropped from 745,000 in 2001 to 715,000 in 2002, according to the Bureau of Labor Statistics. And what's worse, Kamer said, because of technology's tattered image, computer science enrollment at universities dropped, too.

Gap in enrollment

"The general impression among college students and their parents was, 'Don't major in it because you won't be able to get a job,'" she said. "Now we are reaping the problems caused by the gap in student

enrollment."

The shortages are alarming, local experts have said, because they see high technology as an engine of Long Island's economic growth.

Nationally, some studies suggest that information technology alone has accounted for as much as one-third of U.S economic growth in the past decade, Kamer said.

"If the tech workers are not ... forthcoming, then companies won't expand here, and companies won't come here," she said. "We lose our major competitive advantage."

Numbers on the industry's overall shortfall are hard to come by because almost every industry, even fast food, has computer-related jobs.

"These used to be more stand-alone occupations," said Gary Huth, the state Labor Department's principal economist for Long Island. "But now they're diffused across a broader array of industries."

Demand exploding

While pinning down data on the shortfall is difficult, rounding up statistics on the demand isn't. In a recent survey by the California staffing company Robert Half Technology, 77 percent of chief information officers at U.S. companies with at least 100 employees said they were struggling to find qualified candidates.

Five of the top 10 fastest-growing jobs in New York State between 2004 and 2014 will involve high technology, including such positions as software engineers and database administrators, according to state Labor Department data. That means for businesses and universities, it's catch-up time.

Viola, the staffing company owner, believes that involves restoring tech's image as a field with a lot of high-paying, secure jobs. She has tried to do that through forums sponsored by the Long Island chapter of the Association of Information Technology Professionals, a group she heads, and by encouraging schools and companies to work together.

Long Island has about 28,000 workers in the category of information technology alone, with an average wage of nearly \$85,000, well above the overall average private-sector wage of nearly \$52,000, according to state Labor Department data.

Viola noted that few people know the metropolitan area - which besides Long Island and New York includes parts of New Jersey and Pennsylvania - has the highest number of tech workers in the country, as a recent American Electronics Association study showed.

"I don't understand why the word isn't getting out," she said.

Local evidence suggests the tide is turning. One of the biggest measures of that is growing enrollment; students are rekindling their interest in computer science degrees after a significant slump.

The number of computer science majors at Stony Brook University had plummeted from 1,100 in 2001 to 550 by 2006, said Aries Kaufman, chairman of the school's computer science department and a distinguished professor. Since 2006, though, enrollment has inched up, he said, buoyed by stories of high salaries for IT workers with degrees and less fear about specialized jobs being outsourced.

"We've definitely turned the corner," Kaufman said. "But it takes time to build up the enrollment back to where it was in 2001-2002."

But the push is on.

Recruiting young women

To encourage more young women to consider a high-tech career, Stony Brook, Microsoft and Motorola recently hosted the second annual, three-day DigiGirlz camp at the university for girls ages 13 to 18. At the event, which took place July 14-16, students learned skills ranging from designing computer graphics to taking apart a computer.

"The sooner we can influence them, the better chances we have at inspiring them to enter the field," said Laurie Carey, a Microsoft technology specialist and one of the camp organizers.

Scott Passeser, director of outreach at Stony Brook's Center of Excellence in Wireless & IT, who regularly speaks to students and their parents about high-tech careers, said that because the field is male-dominated young women often shy away from it. And he added, "There is no public relations push to get women into this field."

Ellen O'Brien, 15, a 10th-grader from Wantagh, said she benefited from the camp.

"I thought it was really cool," she said. "You learn how everything works inside a computer."

Helen-Arlene Testamark, 17, who traveled daily from Harlem, said, "It made me even more encouraged to go into the industry."

Forging links between business and academia is key to resolving the shortage, said Bob Venero, president of Future Tech Enterprise, a Holbrook company that provides computer services to businesses.

"Whether it's boys or girls in middle school, high school or college students," he said, "we need to educate people about the numerous IT opportunities that will be available to them in the next decade."

Of Interest

Five of the top 10 fastest-growing jobs in New York State for 2004-2014 will be computer-related, according to the Department of Labor.

The five and their rankings:

network systems and data communications analysts (1),

systems software engineers (2),

applications software engineers (5),

network and computer systems administrators (6),

and database administrators (7).

Copyright © 2008, [Newsday Inc.](#)