

Faces of Technology

Co Ho

Systems Technology Manager,
Fullerton College

by Jennifer Gednalske, Editor, CCC TechEDge



Co Ho, the Systems Technology Manager at Fullerton College, learned everything from scratch. Part of a wave of immigrants coming from Vietnam in the early 1980s, he had never worked with computers before. Today he is one of Fullerton College's most valued technology team members. Co has an innate ability to see areas that need improvement and design programs that increase campus productivity and make life simpler.

Co was first exposed to computers when he came to Fullerton College in 1985. His first job was in the cafeteria. Co was taking a class on the Apple 2e computers at the time however, and inquired about working as a lab aid. The lab supervisor originally told him he had to first finish physics and calculus. Later, he had an opportunity to approach the Director of Campus Computing, Chuck Schneebeck. Schneebeck was impressed and readily gave him a job in the new lab for faculty.

The faculty lab was usually empty at that time, so Co spent his time learning about computers and then moved on to developing software. His focus was on areas he noticed were lacking. One of the first programs he developed was a menu application that allowed students to clock lab attendance without knowing DOS commands.

Another useful tool Co developed was the Time-Keeper system, which automated student lab usage tracking through a proprietary barcode network back in 1987. Although it has been upgraded several times, Time-Keeper is still used in Fullerton College computer labs today. Co's development of the Time-Keeper software won him recognition and eventually a full-time position at Fullerton College in 1988.

As a full-time employee, Co continued to develop innovative projects that intuitively met the needs

of the campus. He completed his work at Fullerton College and received a BS and MBA from California State University, Fullerton. His next director, Dr. Nilo Niccolai, was hired in 1997. When Dr. Niccolai came on board, Co was finally able to get the funding he needed for his innovative ideas and Co still credits him for his own recognition.

"I think my boss Dr. Niccolai is probably one of the most outstanding professionals I have ever come across," Co said. "I think we were very, very lucky to get him in our environment. It's rare in the education environment to have access to people of that kind of caliber."

Dr. Niccolai came from the private sector. Formerly, he had worked as a CIO of several big, private companies and had experience procuring and stretching resources effectively. Prior to working in the private sector, Dr. Niccolai had been a professor at University of North Carolina and also had experience working in academia. Before Dr. Niccolai came on as Co's director, Co had been considering "jumping ship" to take part in the still viable dot.com boom.

"We used to run the entire campus network on a Novell NetWare server on a no-name PC clone at the time. We were really struggling with it. When Dr. Niccolai came in we talked to him about it. He made a believer out of me when he was actually able to get the money to order a real Compaq server—five of them, actually," Co said. "I thought, 'Wow, this is amazing' and I decided to stay."

The department was able to accomplish more in the first six months of Dr. Niccolai being there than Co had seen in his previous five years at Fullerton College. While his former director had struggled with obtaining the resources needed to keep their systems running and up-to-date, Dr. Niccolai was able to convince the school to allocate funding because of his credentials, background and experience. They were suddenly able to get the resources they needed to make real changes.

Dr. Niccolai not only oversaw the team, but was ready to pick up a wrench and a screwdriver to make sure everything worked. "Last summer when we were pulling sixteen hour shifts to move the Data Center, he brought his tool box in. He actually helped disassemble the entire 25-foot worth of server racks himself," Co said. "I have never seen anybody like that before, a director so willing to jump in with help like that."

The biggest project Co's department dealt with was their Data Center move last summer. This move was

completed within the allotted time of 86 hours, despite many obstacles. Co described this as the hardest job he ever had to accomplish.

Fullerton College serves approximately



Co's 3rd grade class in Vietnam. He is the one reading the book.



Co's first digital picture taken at SIGGRAPH 1987.



Winning the National MBA Case Award for Cal State Fullerton in 2002.



Co Ho accepts his 2007 Excellence in Technology Award from Patrick Perry, CCC Vice Chancellor of Technology, Research and Information Systems, on the left, and Larry Toy, President Emeritus of the Foundation for the CCC, on the right.

22,000 students and their original Data Center building had to be demolished almost simultaneously with the move. That involved moving the current center within a weekend, which was just a capstone after months of prerequisite network redesign, fiber routing, and even a full-blown VoIP replacement of the phone system.

"Everything was connected to our Data Center. We didn't have the money to build a new center and get new equipment, set up and then transfer everything over. They turned the power on in the new Data Center on a Wednesday and I was supposed to have everything in there and up and running by the next Monday," Co said.

To further complicate the process, the distance education system had to stay connected the whole time for instructors to be able to do their grades. The new VoIP phone system, which also rode on the network, needed to be maintained throughout the entire process. All this was accomplished with a technology and systems staff of three network engineers, two programmers and a handful of hourly helpers.

"I actually measured how long it would take to un-rack and remount a server with a stopwatch, and I found out that we wouldn't have enough time. Luckily we were able to 'borrow' some more labor support for the mechanical tasks; otherwise we would have been doomed. It was probably the biggest accomplishment ever in my life," Co said. "We had no time for a Plan B."

In 2007, Co received an Excellence in Technology Leadership Award from the California Community Colleges Technology Awards Program. Dr. Niccolai nominated Co for the award. One of the major projects that had drawn statewide attention, was his development of the Fullerton Theatre Festival's

scheduling and scoring program.

The Fullerton Theatre Festival scheduling program was developed out of a need to serve a popular program developed in the early 1990s. The annual Fullerton College High School Theatre Festival currently has almost 100 high schools competing in different events with 2,000 to 3,000 students and hundreds of judges. Scheduling was originally done with a simple dBase program which quickly got out of hand as the festival rapidly grew. At first, the secretary of the theatre department would hand type all of the submitted entries and scoring information into the computer. But still nothing was efficient enough to keep track of the growing amount of entries.



Jenney, Timmy and Co Ho.

That's when Co stepped in to develop a system to keep track of entrants, performance times and scores. Every year Co meets with the Theatre Department and the project continually evolves to help meet the needs of the growing festival. Registrants can now self-register over the Web, download their performance schedules and all scores are quickly scanned using barcodes.

After graduating from Fullerton College, Co continued working in the lab as a full-time computer programmer and earning his BS and MBA from California State University, Fullerton. He is currently close to finishing a second Master's in Theology at Fullerton Seminary.

What little spare time Co has left he spends

as a pastor at the Vietnamese Alliance Church in Midway City, focusing on the unique needs of the Vietnamese immigrant community and second generation Vietnamese-Americans. Both Co and his wife, Jenney, hold weekly youth group meetings for which Jenney always cooks food for about fifty people. "The transition for immigrants is tough. After 30 years of immigration, the younger generation no longer speaks or understands the Vietnamese language or the older generation, and the faith is not passed along. My role is helping with that transition." Co said.

Jenney is the Director of Purchasing at Cerritos College. "Despite making more money than I do, she still cooks for our family every night," Co said. In 1993, right before the rise of the Internet, Co was invited by his former boss, Chuck Schneebeck, to take a position at the California Education and Research Federation Network (CERFnet) Supercomputer Center near San Diego. CERFnet was founded in 1988 and was on the forefront of bringing Internet technology to the education system. Co, who had just begun dating Jenney, wavered on what to do.

"I was afraid I would be missing a chance of a lifetime, but I knew I was also in love and didn't want to leave," Co said. "I finally consulted with a mentor, who was this kind of Yoda-type. He told me simply, 'Technology is relatively fast to catch up, but relationships take a long time to build.' I decided to stay and I haven't regretted that decision at all."

Co and Jenney have a nine-year old son, Timmy, who likes video games but does not currently share his father's passion for information technology. Recently, Co and Jenney, who describe themselves as very urban, accompanied Timmy and his class on a trip to Yosemite. "I think I learned more than my son did," he laughed. <>



Co and his church youth group.

"Faces of Technology" is a regular feature of TechEDge newsletter. Each issue it will highlight an individual making contributions to technology in the California Community Colleges.