

## Caught on Camera : Facial-recognition technology part of Pellissippi program to train security experts

By Andrew Eder  
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A new camera technology that recognizes individuals by scanning faces and storing the unique profile is part of Pellissippi State Technical Community College's program to train the next generation of security experts.

The facial-recognition technology, from the San Francisco company 3VR Security, has the potential for use in controlling access to buildings and spaces as well as a valuable investigative tool. The system is part of the rapidly expanding biometrics industry where revenue is expected to double within five years.

Students at Pellissippi State can receive training on the camera and software as part of the school's Security Engineering and Administration Technology program.

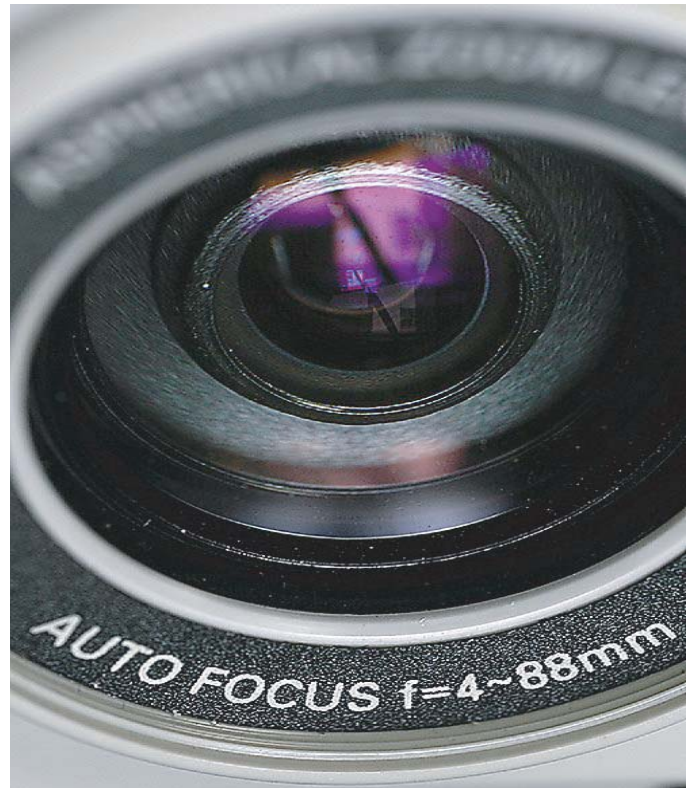
"The whole profession of security is becoming higher-tech and more professional," said program coordinator John Sterling, who has worked with both Tennessee and North Carolina in the area of homeland security.

The two-year program helps students get a foothold in the burgeoning security industry by educating them in the legal, moral and ethical aspects of security as well as the nuts-and-bolts of asset control, threat planning and crime prevention.

This fall, the SEAT program will launch in full with 14 classes and there are 15 declared SEAT majors, Sterling said.

The program is launching at a time of growth and change for the security industry. Al Garcia, director of operations for Oak Ridge-based Security Consultants Group Inc., said there has been a dramatic increase in demand for security services since the Sept. 11 terrorist attacks.

At the same time, security companies are seeking



employees with higher levels of education and experience.

"These systems are becoming more complicated and technically challenging," Garcia said. "It's not just about finding someone who can install systems anymore."

The heavy demand and increased specialization of the security industry mean that students in the program should find a wealth of job opportunities.

"Certainly, we welcome this degree and this curriculum," said Garret Scott, a security engineer with Security Consultants Group. "A formal education is something we need."

Sterling said the SEAT program points students toward careers in areas such as emergency planning, government security, corporate management and human resources. He said the program's multidiscipline approach is influenced by a post-Sept. 11 mind-set.

"Historically in the security industry, the biggest focus was on asset control," Sterling said. "Terrorism was not routinely considered as part of threat planning.

"Since 9/11, we realized that a terrorist looks at our operation through different eyes."

The 3VR facial recognition technology has both preventative and investigative uses. The software measures 80 points on a person's face to create a profile, which is stored with an identification number.

When the camera spots the same individual, the program calls up the profile, creating a log of entry and activity in a building or area.

The technology also can bring up all instances of a profile in the system, cutting down on the time needed to comb through surveillance videos following an incident.

"It's a tremendous investigation tool," Sterling said. "It saves countless hours of an investigator's time."

The technology falls under the category of biometrics, which refers to a person's innate physical characteristics. Other examples of biometrics include fingerprint identification and retinal scanning.

The International Biometric Group, a consulting and integration firm, reported that global biometric revenues are projected to grow from \$2.1 billion this year to \$5.7



billion in 2010.

Scott, the security engineer, said the use of biometrics is expanding as the technology matures and production costs come down.

"We're right at the point where the transition is going to become exponential," he said.

The federal government is actively pursuing biometric technologies, and skills with facial recognition technology will be valuable as the government looks for ways to identify people without direct contact, Scott said.

Sterling, a former infantry captain and street cop, said the technology holds great promise. But he said the biometric solution must be supplemented with the types of skills the SEAT program provides.

"Technology should never be relied upon as the sole solution to our problems," Sterling said.