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PRIVATE EYES

WHEN I WALKED into the windowless basement lab in Etcheverry Hall, I didn't realize I was being watched. But there I was, in high-resolution video on a laptop computer screen. Could it be streamed online for anyone to see? What if I had a stalker, or a bad hair day? In Professor Ken Goldberg's Industrial Engineering and Operations Research workshop, his team is teaching cameras to respect my potential outrage.

After 9/11, increased suspicion led to heightened security at airports, offices, and public institutions. Demand grew for networkable robotic cameras with sophisticated pan, tilt, and zoom capabilities, such as the one that captured me unaware. Thus newly affordable, the cameras have become popular for other kinds of surveillance. Now Net surfers can monitor construction site progress from home and zoom in on workers welding. A camera in Times Square offers 24-hour online viewing of tourists wandering Broadway near 46th Street.
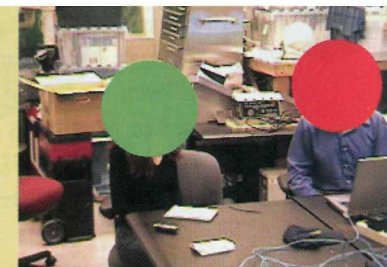
But not everyone likes being watched. In the lab, graduate student Jeremy Schiff is creating a program that teaches computers to recognize certain markers captured on video—a block of color or a particular shape. The idea is that privacy seekers would pick up designated markers before entering areas under surveillance.

I laugh when I don the yellow Home Depot hat that Schiff has taught his demo to recognize, and a huge green dot consistently obscures my head as I move around. Eventually, Schiff's program might use full-body pixelation, and the ultimate aim is for it to recognize something less obtrusive, like a patterned painter's cap. But for now, ever-interested in combining art with technology, Goldberg says the dots pay homage to John Baldessari—an artist who uses colored dots to cover elements of his work.

This project has roots in a controversy sparked when Goldberg set up a camera overlooking Sproul Plaza in 2004. The streaming video was broadcast online, and Web surfers could control the camera's focus; anyone could zoom in and capture an image, then post it to an online gallery. The project, called Demonstrate, was commissioned by New York's Whitney Museum of Art.

"We knew it was going to be controversial, but we weren't sure exactly how it was going to play out," Goldberg says. "We had a very low-resolution Webcam that had been on Sproul Plaza for five years or so [with which] you just get kind of a snapshot of what's going on. What was interesting was that [project] never caused any kind of problem or controversy. It seemed to make a big difference that our camera was much more powerful. You could really zoom in on people, and that crossed the line."

The site was up for only six weeks. During the aftermath, Goldberg met Boalt Hall professor Deirdre Mulligan, an expert in First and Fourth Amendment law. The two got to talking and researching, and found a public policy gap surrounding this technology. They're co-chairing a visual privacy symposium on campus in November called "Unblinking." Goldberg's respectful camera project, funded by the National Science Foundation, will be among many featured at the event.

"If you look at all these reality shows, et cetera, people are dying to be seen," Goldberg says. "And with other people, maybe some days you feel like it and some days you don't."

—*Amy Goldwitz*

Surveillance means "to watch from above." In contrast, sousveillance—"to watch from below"—describes monitoring of authority figures by regular people. Supermarket cameras = surveillance. The Rodney King video = sousveillance.