



BIT WITS
BRAD PATTEN

Here's a silly idea: using plain English

Hurry! Hurry, folks! Step right up. See the dazzling array of Microsoft's incomprehensible new products.

We've got servers you didn't know you needed, programs so bloated we had to ask the World's Fattest Man to leave the tent before we could put them on display, and a whole bunch of gibberish to explain why this is good for your business.

Microsoft is releasing a slew of new products this month. Because people ask me about these things, I try to learn what's what.

It's getting harder. There are so many "servers" now and, frankly, so many meaningless and incomprehensible new features added to old favorites, that I wonder if Microsoft has forgotten there are 23 million small businesses in America.

We're half the private work force. How about making some products for us?

Scrolling through the list of Microsoft products, I find myself struggling to understand their purpose.

There are now about two dozen servers with names like Biz Talk Server, Speech Server and SharePoint Portal Server. Functions are not always clear.

Here's the scoop from Microsoft's Web site about the new Identity Integration Server.

"Microsoft Identity Integration Server 2003 helps you synchronize identity information across a wide variety of identity stores; easily provision and deprovision accounts and identity information across systems; and enable self-service and help-desk initiated password management and reset from a Web browser," it says.

Talk about an identity crisis!

My favorite new server is the Live Communications Server 2003. It's "the new enterprise instant-messaging solution and real-time communications platform from Microsoft that helps information workers get connected and communicate with impact."

Instant message to Microsoft: Check out something called the telephone. It's been around for a while.

When you're done with that, you might try the conference room down the hall. That's a good place to get connected.

SEE UPDATE, PAGE A35

TECHNOW

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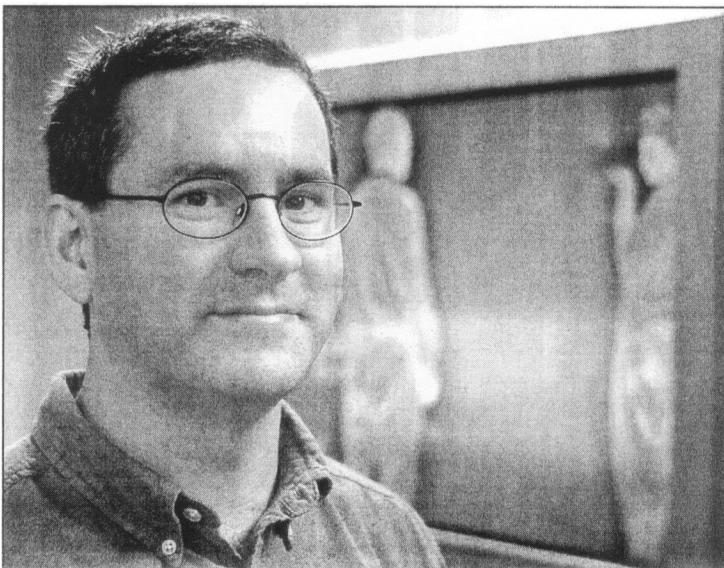
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H-factor

Web security awareness program can eliminate human mistakes. A35



James W. Davis, assistant professor at Ohio State University, has received a \$500,000 grant from the National Science Foundation to research an advanced video surveillance system that uses thermal technology.

HOT ON SURVEILLANCE

Thermal technology grows in popularity, importance in post-9/11 world

BY LAURA NEWPOFF ■ BUSINESS FIRST
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James W. Davis started his work on human activity analysis with computers 10 years ago — before there was a Department of Homeland Security and before groups of terrorists turned airplanes into weapons on Sept. 11, 2001.

The assistant professor of computer and information science at Ohio State University has created an advanced video surveillance system that combines a thermal camera with computer learning methods, allowing for the kind of visual recognition that seems effort-

less for humans.

If Davis has his way, the system will be able to monitor public spaces for suspicious activities. And, because of the thermal technology, the night will no longer provide cover to those wishing to go undetected.

"We'd like to be able to have early detection of when uncertain events are going to happen," Davis said. "What we do is collect several examples of certain activities, collect a series of images of people walking or running, and store a big database of that."

Davis' timing is good. J.P. Freeman Co. Inc. of Newtown, Conn., provider of research to the security and automation industries, has predicted the video surveillance equipment market will surge to about \$8 billion by 2008 from about \$1 billion last year.

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"A lot of surveillance systems can detect people, but we're now looking at thermal imagery, a higher-tech thing."

James Davis, Ohio State University

BRIEFS

Ohio Farm Bureau opposes Third Frontier bond issue

The Ohio Farm Bureau has come out against Issue 1, a \$500 million bond issue to raise money for high-tech development in Ohio.

The issue is part of Gov. Bob Taft's Third Frontier project, a 10-year, \$1.6 billion plan designed to attract high-tech businesses and jobs.

But the bureau thinks a better way to attract business would be to lower taxes and crack down on frivolous lawsuits.

"The Farm Bureau agrees with the governor that Ohio has some serious economic challenges," Jack Fisher, the bureau's executive vice president, said in a press release. "We just think there are better ways than a half-billion-dollar debt obligation to fix those problems."

Taft proposes to pay for the bond issue with Ohio's existing revenue, not by raising new taxes. The Farm Bureau said that will burden the state's general fund. Also, the bureau said the state shouldn't favor one industry over others.

Voters will consider Issue 1 on the Nov. 4 ballot.

Pinnacle Data Systems lands \$1M order

Pinnacle Data Systems Inc., a Grovport-based firm that designs and builds computer systems, reported it won a \$1 million order from a global telecommunications provider.

The contract is large for Pinnacle's size. Pinnacle lost \$19,000 on sales of \$15.7 million last year.

Pinnacle did not disclose the name of the client, but said it is located in Asia. Pinnacle will ship the full order in the current quarter.

Franklin County offering online tax payments

Franklin County residents can now pay their property taxes online.

Treasurer Richard Cordray will offer a new "e-check" option at www.co.franklin.oh.us/treasurer. Residents can visit the site, look up their parcel numbers and have the taxes deducted directly from their checking accounts.

The option will also help the county be more efficient, as the money will be deposited directly into the county's accounts.

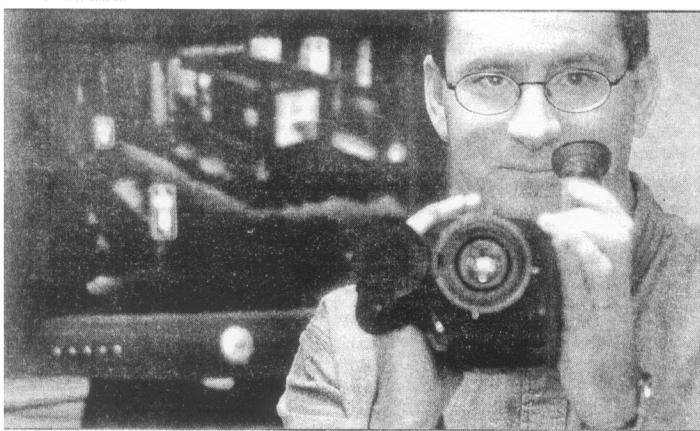
There is no extra charge for using the online system.

ECNext lands Kline contract

ECNext Inc. of Columbus will help Kline & Co. sell market research reports over the Internet.

Little Falls, N.J.-based Kline is a business consulting group with practices in the fields of agricultural chemicals, life sciences and petroleum.

Compiled from BUSINESS FIRST staff reports.



James W. Davis, Ohio State University assistant professor, holds a thermal camera he's developing.

THERMAL: Researchers focus on security

FROM PAGE A31

Subtle cues

Davis' system, which isn't patented and doesn't have an official name, also is expected to be used for search and rescue, border patrol and law enforcement operations.

Earlier this year, he received approval for a \$500,000 grant from the National Science Foundation to continue his research for the next five years.

What Davis is trying to do, through the computer learning portion of the project, is to create a tool to recognize subtle visual cues or nuances in body motion, meaning the surveillance equipment could tell how heavy a box is when being carried by a person, for instance.

The system classifies the activities of humans such as walking, running, standing and throwing. It also determines if a person is a child or adult.

The other component of the system is the use of thermal cameras that can cost \$20,000 apiece. They are used to measure the amount of heat in a scene, a technology already used by law enforcement agencies and the military to locate people or objects in the dark.

"A lot of surveillance systems can detect people, but we're now looking at thermal imagery, a higher-tech thing," he said.

Thermal cameras also pick up residual heat. If a person puts his hand on a wall and removes it, for instance, the cameras can see the remaining image of a hand print, something standard video cameras can't do.

To build the system, Davis and a team of six OSU undergraduate students have been collecting extensive motion capture images and building a video database of different human activities performed by people of varying ages, genders, heights and weights.

After identifying the characteristics of each action, Davis develops mathematical algorithms so the computer can understand them. Some of those activities – a person running through an area where people normally walk – would be deemed suspicious by the computer, allowing for an alert to be given.

Growing industry

The market for sophisticated video surveillance systems and new technologies to power them has mushroomed since the terrorist attacks. Davis isn't the only one with an interest in the field. An example is SRI International Inc. of Menlo Park, Calif. The firm makes government-sponsored surveil-

lance systems, including one that can detect a person's mood by analyzing physical cues.

Katy Delaney, a spokeswoman for research and development organization Battelle Memorial Institute in Columbus, said researchers all over the country are looking at new uses for existing technologies to improve security.

"There are technologies that were used in the military that are now being adapted for homeland security and first-responder uses," she said. "There are challenges to this and it's not always a seamless process, but it's occurring on a wide scale."

Delaney said commercial technologies also are being transferred to military uses,

"Security people would love to know when a crowd starts to form, not after it forms. So we'd like this technology to be able to help predict something."

James W. Davis
Ohio State University

something she calls an important exchange and "vital part of the innovation and problem-solving process."

And while surveillance systems of all shapes, sizes and capabilities are expected to be in wide demand in the coming years, Davis thinks he has a niche.

"There's something that's missing from a lot of these systems now," he said. "What we're doing is starting to look at multiperson interactions – is someone following another person? Or, if a crowd starts to form."

"Security people would love to know when a crowd starts to form, not after it forms," he said. "So we'd like this technology to be able to help predict something."

Davis, who also has received funding from the U.S. Army Night Vision Lab, hasn't ruled out the possibility of the technology being developed into a commercial venture.

"There are a lot of start-up companies working in this area now," he said. "But right now, we're still focused on doing research and development."



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