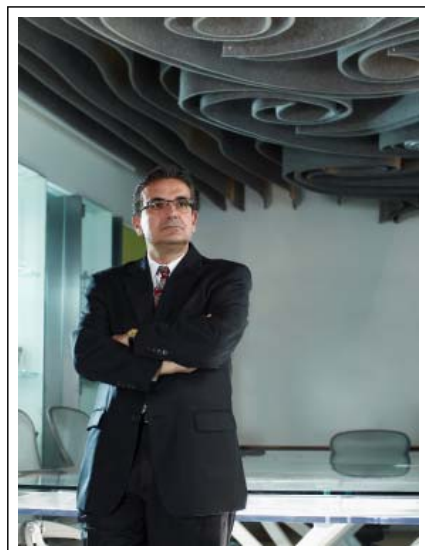


LA STORIES LA CONVERSATIONS LA STYLE LA LIVING LA ENTERTAINMENT LA BLOGS

BROWSE Current Issue Past Issues Topics | POPULAR Overheard 50 Turn It Up | FOLLOW Twitter Facebook RSS

SEARCH



JANUARY 2010

VISIONARY

Information Sage

Caltech data master Ares Rosakis just wants to make sense of it all

"We all deal with this beast called information. We are trying to tame this beast, if you will, to put it to the most use."

And with that, the bespectacled Ares Rosakis tidily sums up the Information Science and Technology Initiative, a sweeping and complex undertaking by the geniuses at Pasadena's California Institute of Technology.

To explain the wizardry of IST to those of us lucky just to have passed high school algebra: In this information age, the amount of data, facts—*stuff*, if you will—has exploded. It is now possible for mankind to measure in nanometers at the subatomic level, trace the vast reaches of the universe in light-years and everything in between—and somewhere, the results of those inquiries are stored.

Rosakis, who oversees the engineering department under which IST falls, explains that at Caltech, they have created the framework to make this varied mass of information accessible to researchers from a wide array of science and humanities backgrounds. The goal is to foster a cross-pollination of ideas around the data in order to build new information-based research and create novel instructional programs that span the academic spectrum.

It sort of sounds like a setup to a punch line: What happens when you put a physicist, a mechanical engineer, a biologist and an economist together with a microresonator and a bazooka? But what comes of this mashup, Rosakis believes, is good for scientists and ultimately good for the rest of us who will reap the benefits of what's created when great minds meet.

Because of this initiative, Southern California Edison will be able to track energy usage more precisely across the region. Or one day, fire departments might be able to ascertain instantly where an earthquake has hit hardest, enabling them to mount the most effective response. The possibilities are endless.

"It's impossible to predict all that will eventually come out of this initiative," says Rosakis. "Who really knows what can happen when all these ideas and expertise rub against one another? Sparks fly."

The Athens-born professor has a way of breaking things down—literally. His research topics alone would fill this page. He's Caltech's chair of engineering and applied science and

