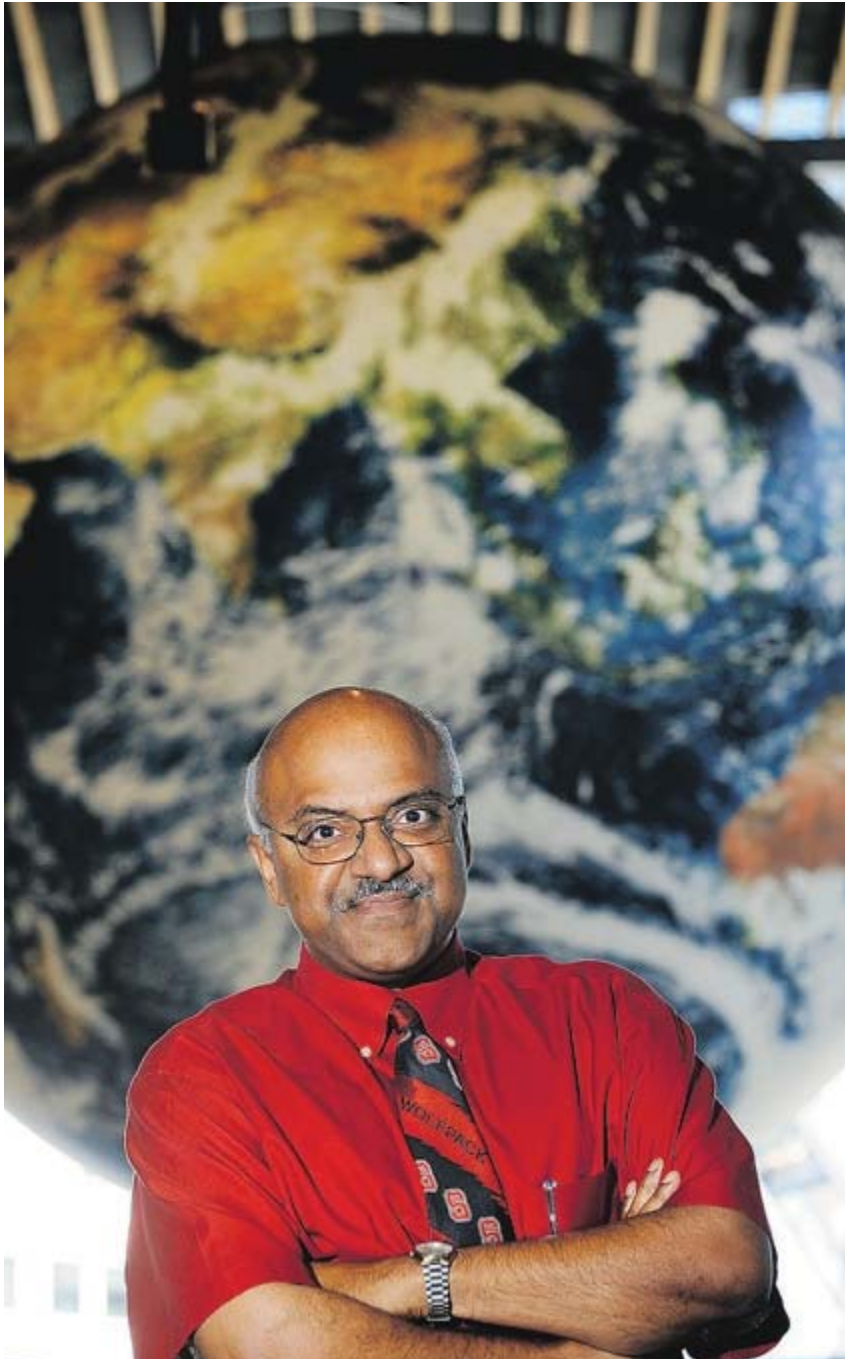


Invasion of the number junkies

Stats Conference: Chief delegate takes time out to offer an opinion on census furor

BY PAUL LUKE, THE PROVINCE AUGUST 1, 2010



Statistics, says Sastry Pantula, American Statistical Association president are like a knife that can be used for good or bad.

Photograph by: Mark van Manen - PNG, The Province

Sastry Pantula had a calculus tutor in his hometown in India's Andhra Pradesh state who believed the mind is clearest in the morning.

So the teenage Pantula found himself being roused at 4 a.m. for his daily lesson. There was no escaping the discipline: the tutor was his father.

But 16-year-old Pantula offered magnificent passive resistance.

"He had to wake me up a few times," Pantula recalls 37 years later.

"I was the last person to arrive for the tutoring session, which was just in our living room with a small blackboard put against the wall.

"My friends, about eight of them, used to arrive on time."

Pantula, president of the American Statistical Association, will get even less sleep and more math over the next five days as he shepherds a massive gathering of statisticians in Vancouver.

About 5,600 number junkies, data dicks, fraction fiends, math maniacs, probability princesses, and regression analysis retentives from across the world are swarming Vancouver for the world's largest annual meeting of statisticians.

Delegates at the meeting, which began Saturday, will palaver about the crucial role of statistics in everything from sex to science to business.

Some of the bolder ones may amble through the Vancouver Convention Centre wearing T-shirts that say, "Statisticians do it with confidence, frequency and variation." After all, Google chief economist Hal Varian has predicted statisticians will have the sexy job of the next decade.

"They are not geeks in any sense of the word," says Pantula, who also heads the statistics department at North Carolina State University.

"One of my colleagues gets excited about sports statistics. There are people who model genes.

"That's a pun," he patiently explains to a humourless reporter.

Even the general public could be intrigued by conference presentations such as "Strategies for pulling a goaltender in hockey" and "Postearthquake efforts in Haiti."

But probably only the pheromones of a hardcore statistician could be stoked by programs as mind-melting as "Nonparametric curve estimation" and "Kernel and spline-based and slice inference regression."

Passersby may imagine they hear a roar coming from the Joint Statistical Meetings, the name given to this annual powwow of the American association and sister groups from Canada to Asia. That would be

the sound of what Pantula calls a data tsunami -- an Internetsparked tidal wave that has yielded statisticians colossal heaps of digits in which to frolic.

One of a statistician's chief delights is to plunge into these numeric tsunamis and surface with treasures, Pantula says.

"Statisticians have the data-mining skills to put a data deluge to good use and find the important nuggets or diamonds," he says.

Having 5,600 tsunami surfers in one place is good business for Vancouver. But it may not be Canada's finest statistical moment.

The statisticians have arrived in the middle of the national uproar over the Harper government's decision to junk the country's mandatory long-form census and replace it with a voluntary survey.

"I think it's a mistake," Pantula says of Ottawa's move. "We need good data, not just any data, and making this voluntary makes the response rate too low and gets biased information."

Another risk is that Canada could get left behind by nations that have retained a commitment to getting good data, he warns.

"This seems to be going in the wrong direction," he says.

So they're fun-loving, smart, sexy and outspoken. But are statisticians honorable?

Don't forget the line Mark Twain attributed to British Prime Minister Benjamin Disraeli: "There are three kinds of lies: lies, damned lies and statistics."

Pantula acknowledges that individuals do manipulate statistical data. Such abuses may sully the image of statisticians a group more than that of the individual abuser, he says.

That's why ethical statisticians must be vigilant data cops ready to expose the misuse of information, he says.

"You can think of statistics as a knife. In the hands of a killer, it could kill somebody. Or it could be a surgeon's knife where it can save somebody's life.

"It all depends on how people use it."

Statistics can be a two-edged knife. Pantula has tried to induce his nine-year-old daughter, Asha, to sleep by giving her math puzzles. They only wake her up.

Numbers, it turns out, are just one of Pantula's passions. He does a few magic tricks and plays racket ball and bridge.

Analytical and probability skills are more useful in certain card games than others, he says.

"If we play poker, we may calculate the odds of different hands, but studying other players' nervous signals gives away more information than anything else." pluke@theprovince.com twitter.
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