

Folks,

The good folks at ITTVIS have been giving a series of occasional seminars for IDL users in Boulder (and perhaps elsewhere, I don't know). But, at least in Boulder, these are extremely well attended, and not just because they were giving out free T-shirts at the end. There has been some fairly good information coming out of them. I attended the "Numerical Analysis Techniques in IDL" session today and thought I would give you a report, just to keep everyone up to date.

The purpose of the seminar was to "learn how to get the most out

Then there was some information on how to unlock the IDL Analyst product. This caused some people in my group to feel like this would be an extended infomercial for IDL Analyst, but as it turned out, IDL Analyst was barely mentioned and all the examples used normal IDL routines.

Mark Piper gave most of the presentation. In my travels in the IDL community I have heard nothing but great reports of Mark's teaching abilities, and now I know why. He is friendly, knowledgeable, an expert communicator, and he can keep a smile on his face even when his first unrehearsed foray into an iTool modification completely crashed IDL. (Oh, well, I've seen worse with the iContour command.)

One of my gripes with IDL examples is that they are often so contrived as to me meaningless or misleading when it comes to applying the example to real-world data. None of that here. Mark used real data, simple enough to use in this setting, but sophisticated enough to make you think you could probably try this at home.

The problem with teaching data analysis is the fear you encounter when you face a room full of people who's livelihood is nothing *but* data analysis, and you have to wave your hands at the little bit you *think* you know. (I speak of myself here, not Mark.) Mark is more knowledgeable about this stuff than I am, but clearly there were people in the audience who wrote their graduate theses on this stuff. Mark handled it all with grace and good humor, and with a minimum amount of handwaving.

When Mark finished, a member of the IDL Professional Development group got up to do a short presentation on "particle swarm

optimisation". I didn't follow too many of the technical details, but basically you throw a billion random "particles" at a curve fitting or minimization problem, and they can coalesce into a solution after some finite number of iterations. The examples were neat, and the code was sparse. (IDL always amazes me!)

The most interesting part of this presentation to me personally was that this person had apparently never heard of the IDL Workbench (or perhaps he had) and had never used it. He showed us the code using the VI editor. Go figure. This part of the presentation seemed rather free of marketing input. :-)

The final presentation of the day was by Peter Messmer of Tech-X Corporation. His company has developed some IDL code that allows you to take advantage of the processing capability built into the 128 processors of your graphics card! Wow. For the right application, this could be extremely useful. Best of all, Tech-X is making it available free (using a GPL license) for people to take advantage of. They plan to make their money by using this as an introduction to the companies other parallel processing products.

<http://www.txcorp.com/technologies/GPULib/index.php>

Overall, I thought it was a useful seminar. I learned a couple of things, had my prejudices about iTools confirmed, and spent a pleasant morning in good company. I appreciate ITTVIS doing this kind of outreach. If you have a chance to attend a seminar, I would highly recommend it.

Cheers,

David

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Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
