
Subject: Re: Interesting article in Nature
Posted by [Fabzi](#) on Thu, 31 Jan 2013 09:38:19 GMT
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Hi Paulo,

Thanks for the link

By the way, in papers it is almost never mentioned in the acknowledgements or so with which tool the graphics have been made. Is IDL (i.e. exelis) for example officially requiring it's users to mention IDL in their manuscripts?

Fab

On 01/31/2013 12:24 AM, Paulo Penteado wrote:

>
> It is not everyday that choosing IDL over other languages gets
> discussed in Nature:
>
> "The algorithms to be incorporated were varied, and included codes for
> estimating snow coverage, grain size and absorption of solar radiation
> by dust and black carbon. They had been written in IDL, a specialized
> programming language used by many researchers. Geographers, remote
> sensing experts and software programmers contributed.
> Most computer scientists would assume that such a system would take
> years, not weeks, to develop. The algorithms would presumably have to
> be rewritten in a standard language such as C++, Java or Python, or
> one that could run on a fast computer system or infrastructure, such
> as Google's MapReduce model.
> But, in my experience, there is no need to rewrite scientific
> algorithms for bigdata systems. Rewriting only increases the barriers
> to communication between scientists and computer engineers. Rewriting
> can also introduce costly errors."
>
> From
>
> <http://dx.doi.org/10.1038/493473a>
>

Subject: Re: Interesting article in Nature
Posted by [lecacheux.alain](#) on Thu, 31 Jan 2013 10:33:15 GMT
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Le jeudi 31 janvier 2013 10:38:19 UTC+1, Fab a écrit :

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Indeed an interesting paper.

The author, who is a scientist, express that the way in which science data are transformed by processing (by using IDL, Matlab, Python or any low level languages) becomes now less important than the way in which the resulting processed data can be archived, distributed or even merged together.

Sure that general and efficient ways for managing multi source data remain to be found (e.g. semantic web research). Nevertheless, regarding its future (and present!) scientific use, I feel important that IDL will be kept fully capable to access all sorts of existing or future shared data structures.

alain.

Subject: Re: Interesting article in Nature

Posted by [Mark Piper](#) on Thu, 31 Jan 2013 14:56:36 GMT

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On Thursday, January 31, 2013 2:38:19 AM UTC-7, Fab wrote:

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>

Definitely not. In fact, this feels somewhat awkward to me; IDL is just a tool for doing science.

(OTOH, it's a nice tool, and it works well, so any mentions would certainly be appreciated!)

mp

Subject: Re: Interesting article in Nature

Posted by [Mark Piper](#) on Thu, 31 Jan 2013 15:15:17 GMT

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On Wednesday, January 30, 2013 4:24:09 PM UTC-7, Paulo Penteado wrote:

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Thank you, Paulo, for linking to this article. I love to post articles such as this internally at VIS to try to help people understand how and why IDL is important to us who use it.

mp

Subject: Re: Interesting article in Nature

Posted by [Russell Ryan](#) on Thu, 31 Jan 2013 15:21:15 GMT

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I generally acknowledge the "tool" in professional papers if the tool is either non-standard (like I've developed some optimization routines in IDL) or am using non-standard settings of standard routines. In some cases the author(s) of the code(s) publish papers on them, so citing my source is easy. But in the case of IDL, I generally just say something like: "... for this we implement [some algorithm] in IDL\footnote{GIVE EXELIS URL}..." Though, I've never published in Nature...

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Subject: Re: Interesting article in Nature
Posted by [penteado](#) on Thu, 31 Jan 2013 21:26:58 GMT
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A couple others in the same subject, though without mentioning IDL:

<http://dx.doi.org/10.1038/467775a>
<http://arxiv.org/abs/1012.4119>

And a whole special edition of Science on that:

<http://www.sciencemag.org/site/special/data/>

Subject: Re: Interesting article in Nature
Posted by [penteado](#) on Fri, 08 Feb 2013 19:01:21 GMT
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I have resolved to, whenever possible, publish with a paper all the data and source code I used to obtain that paper's results.

That way anyone can download everything, replicate the results, and see how it was done. It also causes the tools and languages used to be mentioned somewhere. In the paper itself, I put something along the lines of "The data and the IDL source code used to produce the results shown here are available at xxx".

Just as arXiv requests the LaTeX source files and there are archives to publish the data produced for the paper, I think publishing source code should be standard practice.

On Jan 31, 1:21 pm, rr...@stsci.edu wrote:

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