Subject: Maddening structures
Posted by Edd Edmondson on Mon, 18 Sep 2006 11:47:23 GMT
View Forum Message <> Reply to Message

OK, I've got some data read in so that I have a structure that looks like

data.foo[600] .bar[600] .baz[600] and I want data[600].foo .bar .baz

In other words I want an array of structures rather than a structure of arrays.

Does anyone have any magic that works for the case when foo, bar and baz are not previously known?

Edd

Subject: Re: Maddening structures
Posted by JD Smith on Tue, 19 Sep 2006 18:04:23 GMT
View Forum Message <> Reply to Message

On Mon, 18 Sep 2006 11:47:23 +0000, Edd wrote:

> OK, I've got some data read in so that I have a structure that looks > like > > data.foo[600] .bar[600] > .baz[600] > > and I want data[600].foo .bar > .baz > > In other words I want an array of structures rather than a structure > of arrays.

> Does anyone have any magic that works for the case when foo, bar and

> baz are not previously known?

Read in the field names (from your file) into a string array "fields", and the first set of values into a pointer array "vals", and then create an array of structures like this:

st=create\_struct(fields[0],\*vals[0])
for i=1,nfields-1 do \$
 st=create\_struct(st,fields[i],\*vals[i])
st=replicate(st,ndata)

If your file format describes the type of each field (float, int, string, etc.), you can parse that and make an appropriate vals pointer array from it, rather than divining it from the data themselves (which is more likely to give trouble).

JD

Subject: Re: Maddening structures
Posted by Edd Edmondson on Wed, 20 Sep 2006 09:55:12 GMT
View Forum Message <> Reply to Message

JD Smith <jdsmith@as.arizona.edu> wrote:

- > st=create\_struct(fields[0],\*vals[0])
- > for i=1,nfields-1 do \$
- > st=create\_struct(st,fields[i],\*vals[i])
- > st=replicate(st,ndata)

That loop is particularly cunning. Thank you!

---- -

Edd