Subject: Re: Transferring image pixel values to a DICOM file
Posted by dplatten on Tue, 19 Jul 2011 08:11:54 GMT
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Dear Vivek,

I use Bhautik Joshi's dicom_writer.pro to produce DICOM images that contain my created test data. You may find it useful - it can be downloaded here: http://cow.mooh.org/dicom_writer.pro

Regards,

David

Subject: Re: Transferring image pixel values to a DICOM file
Posted by Vivek on Tue, 19 Jul 2011 14:06:56 GMT
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On Jul 19, 4:11 am, David Platten <dplat...@gmail.com> wrote:
> Dear Vivek,
>
> I use Bhautik Joshi's dicom_writer.pro to produce DICOM images that contain my created test data. You may find it useful - it can be downloaded here:http://cow.mooh.org/dicom_writer.pro
>
> Regards,
>
> David

Hello David,

I have seen this before, but as a part of my work, I have to do this manually. I was probably misleading when I stated my goal I suppose. I need to know how to transfer images/pixel values to DICOM files. Any ideas regarding this?

Thanks for the suggestion though :)

Regards,

Vivek

Subject: Re: Transferring image pixel values to a DICOM file
Posted by Vivek on Tue, 19 Jul 2011 14:18:47 GMT
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On Jul 19, 10:06 am, Vivek <vivek.rajshek...@gmail.com> wrote:

> On Jul 19, 4:11 am, David Platten <dplat...@gmail.com> wrote:
>
>> Dear Vivek,
>
>> I use Bhautik Joshi's dicom_writer.pro to produce DICOM images that contain my created test data. You may find it useful - it can be downloaded here:http://cow.mooh.org/dicom_writer.pro
>
>> Regards,
>
>> David
>
> Hello David,
>
> I have seen this before, but as a part of my work, I have to do this
> manually. I was probably misleading when I stated my goal I suppose. I
> need to know how to transfer images/pixel values to DICOM files. Any
> ideas regarding this?
>
> Thanks for the suggestion though :)
>
> Regards,
>
> Vivek

I am trying to use inbuilt IDL functions to do this, the IDLffDicomEx module to be precise.

---

Subject: Re: Transferring image pixel values to a DICOM file
Posted by dplatten on Wed, 20 Jul 2011 10:37:53 GMT
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Hi Vivek,

I used to use another method to create computed tomography DICOM files containing my own image data. I took an existing DICOM image, opened it, and then wrote my new image data over the existing image data in the file, and then saved the file. It was a nasty way to do it, but it worked. The CT images I was working on always had 512x512 pixels. An example of the code is below. There must be a more elegant way of doing this!

Regards,

David

```
PRO modifyDICOM

  ; create an array to hold the generated image
```

```
  x_dim = 512
  y_dim = 512
  new_data = INTARR(x_dim,y_dim)
  new_data[*,*] = 0

  ; generate some test data to write to the image
  ; a diagonal cross
  FOR x = 0, (x_dim-1) DO BEGIN
    new_data[x,x] = 1000
    new_data[(x_dim-1)-x,x] = 1000
  ENDFOR

  ; Or you could load in a tif file with your image data:
  ;image_array = read_tiff('c:\TEMP\StraightEdgeReallyBlurred.tif', channels=1)
  ;new_data = fix(image_array)

  ; Open an existing DICOM file to modify. This must have the
  ; same pixel dimensions as the one you want to create.
  dicomFile = DIALOG_PICKFILE(/MUST_EXIST)

  ; open the file for writing
  OPENU, dcmfile, dicomFile, /GET_LUN, /Append
  POINT_LUN, -dcmfile, a

  ;position file pointer 512*512 from end of file
  POINT_LUN, dcmfile, a-(512l*512*2)

  ; replace the pixel data with the generated data
  WRITEU, dcmfile, new_data

  ; close the file and free the lun
  CLOSE,    dcmfile
  FREE_LUN, dcmfile
END
```

---

Subject: Re: Transferring image pixel values to a DICOM file
Posted by Vivek on Wed, 20 Jul 2011 14:52:08 GMT
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On Jul 20, 6:37 am, David Platten <dplat...@gmail.com> wrote:
> Hi Vivek,
>
> I used to use another method to create computed tomography DICOM files containing my own image data. I took an existing DICOM image, opened it, and then wrote my new image data over the existing image data in the file, and then saved the file. It was a nasty way to do it, but it worked. The CT images I was working on always had 512x512 pixels. An example of the code is below. There must be a more elegant way of doing this!

```
>
>  Regards,
>
>  David
>
>  PRO modifyDICOM
>
>    ; create an array to hold the generated image
>    x_dim = 512
>    y_dim = 512
>    new_data = INTARR(x_dim,y_dim)
>    new_data[*,*] = 0
>
>    ; generate some test data to write to the image
>    ; a diagonal cross
>    FOR x = 0, (x_dim-1) DO BEGIN
>       new_data[x,x] = 1000
>       new_data[(x_dim-1)-x,x] = 1000
>    ENDFOR
>
>    ; Or you could load in a tif file with your image data:
>    ;image_array = read_tiff('c:\TEMP\StraightEdgeReallyBlurred.tif', channels=1)
>    ;new_data = fix(image_array)
>
>    ; Open an existing DICOM file to modify. This must have the
>    ; same pixel dimensions as the one you want to create.
>    dicomFile = DIALOG_PICKFILE(/MUST_EXIST)
>
>    ; open the file for writing
>    OPENU, dcmfile, dicomFile, /GET_LUN, /Append
>    POINT_LUN, -dcmfile, a
>
>    ;position file pointer 512*512 from end of file
>    POINT_LUN, dcmfile, a-(512l*512*2)
>
>    ; replace the pixel data with the generated data
>    WRITEU, dcmfile, new_data
>
>    ; close the file and free the lun
>    CLOSE,    dcmfile
>    FREE_LUN, dcmfile
>  END
```

Hi David,

I managed to get around with my issues thankfully :) But thanks for
the suggestion. I shall keep this in mind as well.

Regards,

Vivek