Subject: Re: Image warping in IDL
Posted by Wox on Wed, 22 Nov 2006 08:21:27 GMT
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On Tue, 21 Nov 2006 10:10:57 -0700, JD Smith <jdsmith@as.arizona.edu>
wrote:

> Interesting method. What I was specificially referring to is that you
> have no "sign" term for dx or dy, so I'm not sure how you know which
> quadrant relative to the target pixel your 4 output pixels occupy (UL,
> UR, LL, LR). It seems you're always hitting a single quadrant.

It's because I use [0,0] instead of [0.5, 0.5] as center of the first
pixel. floor(xy) gives then the lower-left pixel. So UR, UL, LR and LL
are given by:
floor(x)+offx[1,0,1,0]
floor(y)+offy[1,1,0,0]

As a consequence:
dxy=xy-floor(xy)
i.e. without the 0.5, so never negative.

The result will be shifted [0.5,0.5] with your "first-pixel"
definition. I guess if one keeps this definition in further
pixel-coordinate related operations, this isn't a problem.

> For the
> final fsum eq 0. test for empty pix, a simple where(fsum eq 0.) should
> suffice.

I got carried away by the histograms there ;-).