Subject: Probability label relaxation
Posted by pulchowk-campus-alumn on Mon, 30 Jan 2012 13:21:30 GMT
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Dear all,

i am trying to understand a post classification method of probability
labe relaxation method as described by jia and richards !

Mr. Mort canty has coded the algorithm in IDL about i am finding hard
to understand the logic behind how the "compatibility
coefficients" is being carried out in the code ! His code is available
at http://mcanty.homepage.t-online.de/software.html.

if anybody could shed light on how the compatibility coefficients is
carried out, i will be a happy man.

Subject: Re: Probability label relaxation
Posted by mort.canty on Tue, 31 Jan 2012 15:55:14 GMT
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On 30 Jan., 14:21, "pulchowk-campus-alumni-europa@googlegroups.com"
<shres...@googlemail.com> wrote:
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> carried out, i will be a happy man.

The code scans through the initial classification probabilities image,
comparing the class of each pixel with that of its immediate
neighbours. If pixel i has class m and a neighbouring pixel has class
n, then the compatibility matrix element P(m,n) gets bumped by one (we
got some evidence for compatibility of classes m and n). What's maybe
confusing you in the code is that it gets the class by looking for the
maximum class membership probability associated with the pixel, i.e.,
in ENVI terminology it works with the "rule image" and not with the
"classification image".

After the scan, the matrix is normalized. Then the class membership

probabilities of each pixel are "relaxed" according to Richards and Jia (see Eq. 7.5 in my book). You can repeat this as often as you like, but more than 3 or 4 times isn't a good idea.

Hope this makes you happy,

Mort
