

# Disparity map computation by propagation of seeds

## Background:

Get the **disparity map** of two images which have already completed **epipolar rectification**.

Use **local method** to compute **disparity** evaluate it by **NCC** to find the best disparity, then use **seeds expansion** to fill up the disparity map.

## Testing environment:

Linux (ubuntu 16.04 LTS)

## Dependent packages:

Imagine++ - version 4.3.2

<http://imagine.enpc.fr/~monasse/Imagine++/>

## Compile:

Create a new folder called **"build"**

In this folder, run command :

**`cmake ..`**

If cmake success, then run:

**`make`**

If no error appears, then it will generate a executable file called **"Seeds"**, then run:

**`./Seeds`**

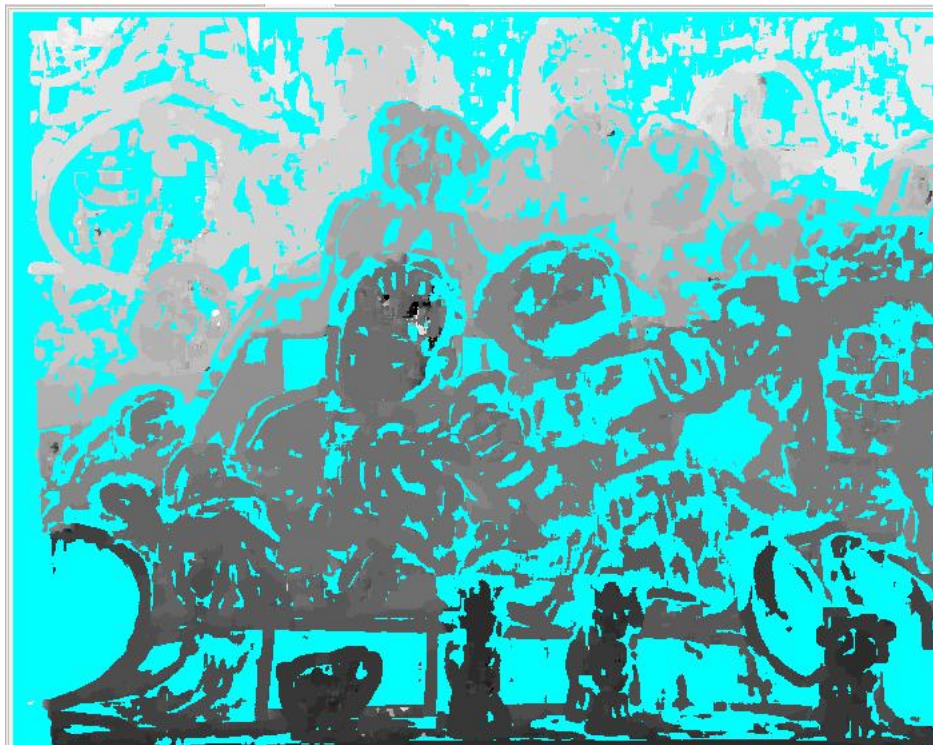
It will lancer this application.

## Usage:

Once application start, it will compute first disparity map by no limited on NCC score, which is easily influenced by noise, lack of gradient variation, intensity discontinuities.



Then it will compute disparity map by limited on NCC score (higher then 0.95), of course some places will not get a best value of disparity, these places will be filled up by next step: propagation of seeds.



After propagation of seeds we can finally get a not bad disparity map, and also it generate a 3D image to show the effect on disparity map.



Click in any window to terminate application.