

IP'17 Testing Cases

Table of Contents

IMPORTANT NOTE	1
First: Geometry and Pixel Operations	2

IMPORTANT NOTE

In all of the following cases, each step (1, 2, 3...etc.) should be applied completely to the original image **NOT** to the previous step... while parts of each step should be incrementally applied.

Example:

On Cat55

- 1- Resize to 1333×1000
Resize to 177×100
- 2- Increase contrast (Stretch the histogram)

This means that you should resize original Cat55 to 1333×1000 , and then resize the result to 177×100 . While increasing contrast should be applied to **the original Cat55**

First: Geometry and Pixel Operations

Image(s)	Operations Sequences	Targeted Task(s)
<i>Translate.bmp</i>	<ol style="list-style-type: none"> 1. Translate in X by +150 2. Translate in X by -135 	1- Translate with wrap
<i>Cat55.bmp</i>	[Forward Mapping] <ol style="list-style-type: none"> 1. ALL: Resize to $W \times H = 400 \times 400$, Rotate 30° & Shear in X by 0.45 	2- Forward mapping (ALL)
<i>Cat55.bmp</i>	[Reverse Mapping] <ol style="list-style-type: none"> 1. Resize to $W \times H = 1280 \times 960$ Resize to $W \times H = 400 \times 400$ Rotation by 30° Shear in X direction by 0.45 2. ALL: Resize to $W \times H = 400 \times 400$, Rotate 30° & Shear in X by 0.45 	<ol style="list-style-type: none"> 3- Reverse mapping 4- Scale 5- Rotation 6- Shear 7- ALL
<i>bird.bmp</i>	<ol style="list-style-type: none"> 1. Decrease RED brightness by 200 Decrease GREEN brightness by 200 Increase RED brightness by 50 	8- Brighten/darken one channel
<i>Cat55 & Marbles</i>	<ol style="list-style-type: none"> 1- Add 2 images 	9- Add
<i>Gamma1</i>	<ol style="list-style-type: none"> 1- Gamma by 0.25 	10- Gamma
<i>Gamma2</i>	<ol style="list-style-type: none"> 1- Gamma by 5 	
<i>ChessWarped</i>	<ul style="list-style-type: none"> Image Warping $Pts1 = \begin{bmatrix} 215 & 95 & 660 & 780 \\ 100 & 295 & 330 & 137 \end{bmatrix}$ $Pts2 = \begin{bmatrix} 1 & 1 & 500 & 500 \\ 1 & 500 & 500 & 1 \end{bmatrix}$	Image warping

THANKS VERY MUCH FOR YOUR EFFORTS

😊GOOD LUCK isA😊