

Image processing in Scilab

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Talk to a Teacher Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

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Learning Objectives

In this tutorial we will learn:

- ▶ **How to install SIVP toolbox**



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- ▶ **Creating filter for image**



System Requirement

- ▶ OS: Ubuntu 11.04



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- ▶ **Scilab 5.3.X**



Prerequisites

- ▶ **Listen to basic Level tutorials in Scilab**



Toolbox

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Toolbox

- ▶ **There are two toolboxes,**
 - ▶ **SIP**



Toolbox

- ▶ **There are two toolboxes,**
 - ▶ SIP
 - ▶ SIVP



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 - ▶ SIP
 - ▶ SIVP
- ▶ **SIVP stands for Scilab Image and Video Processing**



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 - ▶ SIVP
- ▶ **SIVP stands for Scilab Image and Video Processing**
- ▶ **Works on both windows and linux OS**



Summary

In this tutorial we learnt,

- ▶ Basic commands in Scilab(im2bw,rgb2gray etc)



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Assignment

1. Convert a given image into 32 bit signed integer



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2. Convert a given image into 16 bit unsigned integer



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1. Convert a given image into 32 bit signed integer
2. Convert a given image into 16 bit unsigned integer
3. Add 'speckle' noise to given image



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1. Convert a given image into 32 bit signed integer
2. Convert a given image into 16 bit unsigned integer
3. Add 'speckle' noise to given image
4. Resize a given image by factor of 1.5 using bilinear interpolation



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About the Spoken Tutorial Project

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- ▶ If you do not have good bandwidth, you can download and watch it



About the Spoken Tutorial Project

The Spoken Tutorial Project Team

- ▶ **Conducts workshops using spoken tutorials**



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- ▶ More information on the same is available at:

<http://spoken-tutorial.org/NMEICT-Intro>



About the contributor

- ▶ **This script is contributed by
Abhishek Pawar**



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- ▶ **This is Anuradha Amrutkar signing off**



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- ▶ **Thank you**

