Image Operations Dataflow Computing

Abdulwahab Alkharashi
2016 Indiana University, Bloomington

Outline

- Image Operations
- Application Examples
- Input Data
- Data Interpretation

Image Operations

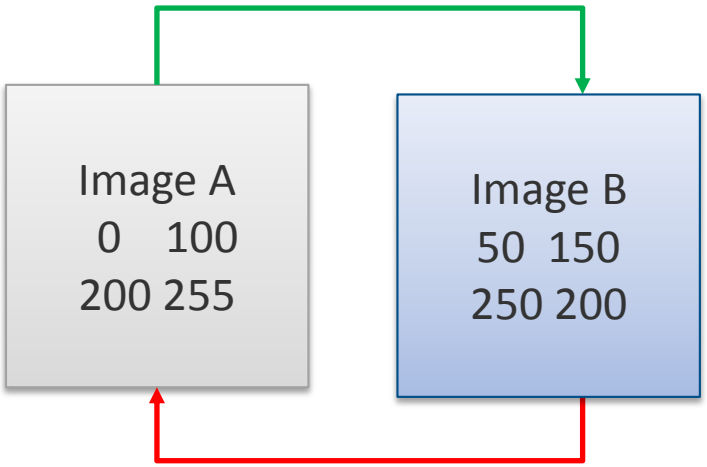
- Performs arithmetic operations to add or remove some objects (pixels) from an image to another
- Addition is measured by the value of the pixel, it sets the output to the maximum value if the sum is greater than the maximum
- Subtraction is similar and sets the value to 0 if the difference is less than 0

Application Examples

- Reduction of random noise by adding images of the same scene or motion
- Detection by subtracting two images
- Combine two binary images

Input Data

- A program takes two arrays of pixels
- Calculation is done by:
  - Addition [50,250,255,255]
  - Subtraction [0,0,0,55]



Data Interpretation

- Data can be submitted by identifying the size of pixels of any given images
- Results should highlight the array values of such an arithmetic image operations