```
image=loadImage('images1/proj_4.png');

rows=1;
cols=1;

I = imread("./images1/org_1.png");
fixedPoints = [26.5 26.5; 26.5 445.5; 445.5 26.5; 445.5  445.5];
myDir = fullfile('./images1');
imageNames = [];
imageThumbnails = [];

Filename = {'Sanchez';'Johnson';'Li';'Diaz';'Brown'};
Image = [38;43;38;40;49];
Output = logical([1;0;1;0;1]);
Success = [71;69;64;67;64];
Notes = [176;163;131;133;119];
BloodPressure = [124 93; 109 77; 125 83; 117 75; 122 80];

myFiles = dir(fullfile(myDir,'*.png'));
for k = 1:length(myFiles)

    filename = myFiles(k);
    baseFileName = myFiles(k).name;
    fullFileName = fullfile(myDir, baseFileName);
    filecontent = imread(fullFileName);
    imageNames = [imageNames; string(fullFileName)];
    image=loadImage(fullFileName);
    [centers,radii]= findCircles(image);
    Iblur1 = imgaussfilt(image,2);
    registered = correctImage(Iblur1, fixedPoints, centers, I);
    resultMatrix = findColours(registered);
    disp(fullFileName)
    disp(resultMatrix)
    count=0;
    figure(k)
    montage({registered, cropped})
    title(fullFileName)
%     viscircles(centers,radii);

 end

disp('----')


disp(table(LastName,Age,Smoker,Height,Weight,BloodPressure))
```

```
Blue
Yellow
Green
White
Green
White
```

```
White
Blue
White
White
Green
White
Blue
Yellow
Yellow
Yellow
./images1/noise_1.png
    "Blue"     "Yellow"    "Green"     "White"
    "Green"    "White"     "White"     "Blue"
    "White"    "White"     "Green"     "White"
    "Blue"     "Yellow"    "Yellow"    "Yellow"

Yellow
White
White
Blue
Yellow
Blue
Blue
Yellow
Blue
Blue
Yellow
Blue
Yellow
Yellow
White
White
./images1/noise_2.png
    "Yellow"    "White"     "White"     "Blue"
    "Yellow"    "Blue"      "Blue"      "Yellow"
    "Blue"      "Blue"      "Yellow"    "Blue"
    "Yellow"    "Yellow"    "White"     "White"

White
Red
Red
Blue
White
White
Blue
White
Red
White
Red
White
White
Blue
White
Blue
```

```
./images1/noise_3.png
    "White"    "Red"      "Red"      "Blue"
    "White"    "White"    "Blue"     "White"
    "Red"      "White"    "Red"      "White"
    "White"    "Blue"     "White"    "Blue"

Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
Black
./images1/noise_4.png
    "Black"    "Black"    "Black"    "Black"
    "Black"    "Black"    "Black"    "Black"
    "Black"    "Black"    "Black"    "Black"
    "Black"    "Black"    "Black"    "Black"

White
White
White
Blue
Blue
Blue
White
White
White
Blue
White
White
White
White
White
White
./images1/noise_5.png
    "White"    "White"    "White"    "Blue"
    "Blue"     "Blue"     "White"    "White"
    "White"    "Blue"     "White"    "White"
    "White"    "White"    "White"    "White"

Yellow
Yellow
Blue
Blue
```

```
Red
Red
Yellow
Red
Blue
Yellow
Blue
Blue
Red
Yellow
Red
Blue
./images1/org_1.png
    "Yellow"    "Yellow"    "Blue"      "Blue"
    "Red"       "Red"       "Yellow"    "Red"
    "Blue"      "Yellow"    "Blue"      "Blue"
    "Red"       "Yellow"    "Red"       "Blue"

Yellow
Blue
Yellow
Blue
Blue
Blue
Yellow
Yellow
Blue
Blue
Blue
Blue
Yellow
Blue
Yellow
Yellow
./images1/org_2.png
    "Yellow"    "Blue"    "Yellow"    "Blue"
    "Blue"      "Blue"    "Yellow"    "Yellow"
    "Blue"      "Blue"    "Blue"      "Blue"
    "Yellow"    "Blue"    "Yellow"    "Yellow"

Red
Red
Yellow
Blue
Blue
Red
Yellow
Red
Red
Blue
Yellow
Red
Red
Blue
```

```
Red
Red
./images1/org_3.png
    "Red"     "Red"     "Yellow"    "Blue"
    "Blue"    "Red"     "Yellow"    "Red"
    "Red"     "Blue"    "Yellow"    "Red"
    "Red"     "Blue"    "Red"       "Red"

Blue
Red
Red
Blue
Red
Blue
Red
Yellow
Blue
Green
Green
Green
Red
Red
Yellow
Red
./images1/org_4.png
    "Blue"    "Red"      "Red"       "Blue"
    "Red"     "Blue"     "Red"       "Yellow"
    "Blue"    "Green"    "Green"     "Green"
    "Red"     "Red"      "Yellow"    "Red"

Yellow
Green
Yellow
Yellow
Green
Green
Green
Blue
Green
Green
Blue
Yellow
Yellow
Yellow
Blue
Blue
./images1/org_5.png
    "Yellow"    "Green"     "Yellow"    "Yellow"
    "Green"     "Green"     "Green"     "Blue"
    "Green"     "Green"     "Blue"      "Yellow"
    "Yellow"    "Yellow"    "Blue"      "Blue"

Red
Yellow
```

```
Blue
Blue
Red
Yellow
Blue
Yellow
Yellow
Blue
Red
Yellow
Blue
Red
Yellow
Blue
./images1/proj1_1.png
    "Red"       "Yellow"    "Blue"      "Blue"
    "Red"       "Yellow"    "Blue"      "Yellow"
    "Yellow"    "Blue"      "Red"       "Yellow"
    "Blue"      "Red"       "Yellow"    "Blue"

Green
Yellow
Green
Blue
Green
Yellow
Yellow
Green
Blue
White
Blue
Yellow
White
Yellow
Green
White
./images1/proj1_2.png
    "Green"     "Yellow"    "Green"     "Blue"
    "Green"     "Yellow"    "Yellow"    "Green"
    "Blue"      "White"     "Blue"      "Yellow"
    "White"     "Yellow"    "Green"     "White"

White
White
White
White
White
White
White
White
White
White
White
White
```

```
White
White
White
White
./images1/proj1_3.png
    "White"    "White"    "White"    "White"
    "White"    "White"    "White"    "White"
    "White"    "White"    "White"    "White"
    "White"    "White"    "White"    "White"

Yellow
Yellow
Green
Yellow
Blue
Blue
Yellow
Blue
Yellow
Yellow
Yellow
Yellow
Blue
Green
Yellow
Yellow
./images1/proj1_4.png
    "Yellow"    "Yellow"    "Green"     "Yellow"
    "Blue"      "Blue"      "Yellow"    "Blue"
    "Yellow"    "Yellow"    "Yellow"    "Yellow"
    "Blue"      "Green"     "Yellow"    "Yellow"

Green
Green
Blue
Red
Red
Blue
Green
Green
Yellow
Red
Green
Red
Red
Green
Red
Yellow
./images1/proj1_5.png
    "Green"     "Green"    "Blue"     "Red"
    "Red"       "Blue"     "Green"    "Green"
    "Yellow"    "Red"      "Green"    "Red"
    "Red"       "Green"    "Red"      "Yellow"
```

```
Green
Blue
Yellow
Blue
Yellow
Green
Blue
Green
Green
Green
Yellow
Red
Yellow
Yellow
Blue
Green
./images1/proj2_1.png
    "Green"     "Blue"      "Yellow"    "Blue"
    "Yellow"    "Green"     "Blue"      "Green"
    "Green"     "Green"     "Yellow"    "Red"
    "Yellow"    "Yellow"    "Blue"      "Green"

Blue
Green
Blue
Green
Green
Green
Yellow
Green
Yellow
Yellow
Blue
Green
Blue
Yellow
Green
Red
./images1/proj2_2.png
    "Blue"      "Green"     "Blue"      "Green"
    "Green"     "Green"     "Yellow"    "Green"
    "Yellow"    "Yellow"    "Blue"      "Green"
    "Blue"      "Yellow"    "Green"     "Red"

Red
Green
Blue
Yellow
Red
Green
Green
Yellow
Green
Red
```

```
Green
Green
Red
Yellow
Blue
Red
./images1/proj2_3.png
    "Red"       "Green"     "Blue"      "Yellow"
    "Red"       "Green"     "Green"     "Yellow"
    "Green"     "Red"       "Green"     "Green"
    "Red"       "Yellow"    "Blue"      "Red"

Red
Yellow
Green
Green
Yellow
Yellow
Red
Yellow
Green
Red
Yellow
Blue
Blue
Green
Blue
Red
./images1/proj2_4.png
    "Red"       "Yellow"    "Green"     "Green"
    "Yellow"    "Yellow"    "Red"       "Yellow"
    "Green"     "Red"       "Yellow"    "Blue"
    "Blue"      "Green"     "Blue"      "Red"

Yellow
Blue
Green
Yellow
Yellow
Blue
Blue
Yellow
Yellow
Blue
Yellow
Yellow
Yellow
Green
Yellow
Blue
./images1/proj2_5.png
    "Yellow"    "Blue"      "Green"     "Yellow"
    "Yellow"    "Blue"      "Blue"      "Yellow"
    "Yellow"    "Blue"      "Yellow"    "Yellow"
```

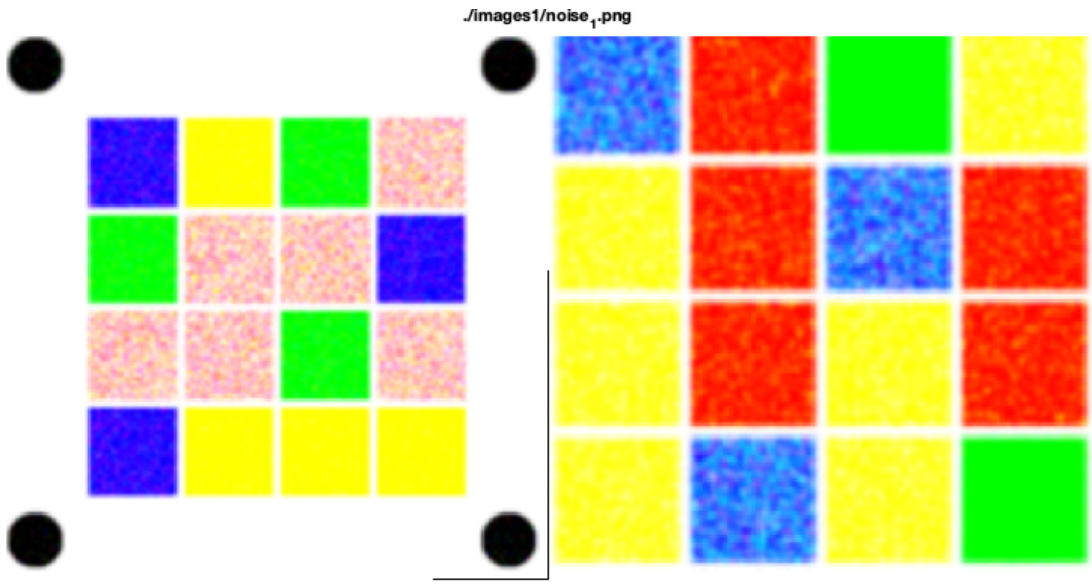
```
    "Yellow"    "Green"    "Yellow"    "Blue"

Yellow
Green
Green
Yellow
Yellow
Yellow
Green
Blue
Red
Blue
Blue
Green
Blue
Green
Green
Yellow
./images1/proj_1.png
    "Yellow"    "Green"     "Green"    "Yellow"
    "Yellow"    "Yellow"    "Green"    "Blue"
    "Red"       "Blue"      "Blue"     "Green"
    "Blue"      "Green"     "Green"    "Yellow"

White
White
White
White
White
White
White
White
Yellow
White
White
White
White
White
White
White
./images1/proj_2.png
    "White"     "White"    "White"    "White"
    "White"     "White"    "White"    "White"
    "Yellow"    "White"    "White"    "White"
    "White"     "White"    "White"    "White"

Red
Red
Blue
Red
Red
Yellow
Blue
Blue
```

```
Blue
Blue
Blue
Blue
Red
Blue
Yellow
Yellow
./images1/proj_3.png
    "Red"     "Red"       "Blue"      "Red"
    "Red"     "Yellow"    "Blue"      "Blue"
    "Blue"    "Blue"      "Blue"      "Blue"
    "Red"     "Blue"      "Yellow"    "Yellow"

Green
Yellow
Red
Red
Red
Green
Green
Green
Blue
Red
Red
Yellow
Blue
Yellow
Yellow
Blue
./images1/proj_4.png
    "Green"    "Yellow"    "Red"       "Red"
    "Red"      "Green"     "Green"     "Green"
    "Blue"     "Red"       "Red"       "Yellow"
    "Blue"     "Yellow"    "Yellow"    "Blue"

Yellow
Green
Blue
Red
Yellow
Yellow
Red
Green
Blue
Blue
Yellow
Yellow
Yellow
Yellow
Blue
Yellow
./images1/proj_5.png
    "Yellow"    "Green"     "Blue"      "Red"
```

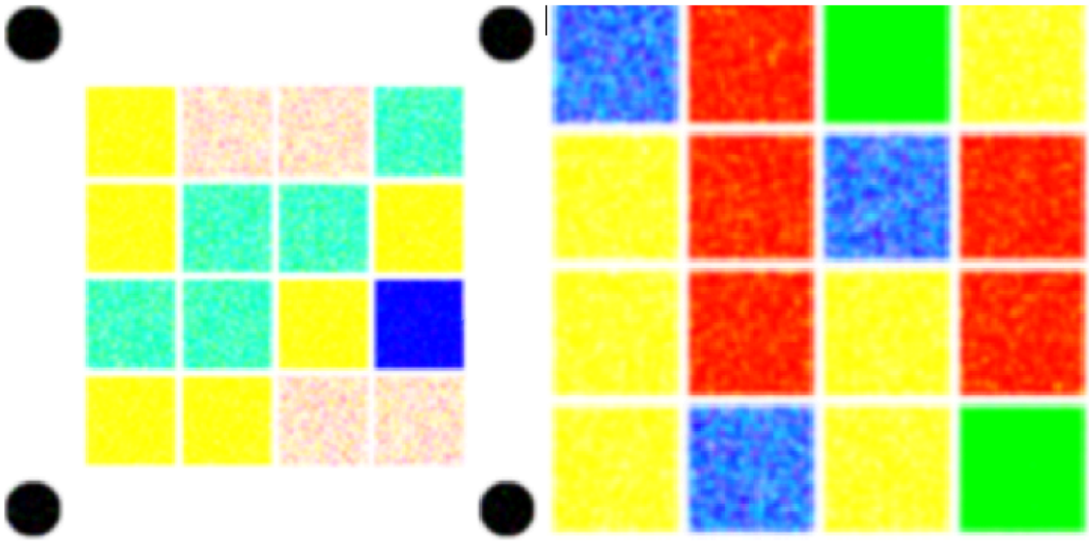
```
    "Yellow"    "Yellow"    "Red"       "Green"
    "Blue"      "Blue"      "Yellow"    "Yellow"
    "Yellow"    "Yellow"    "Blue"      "Yellow"

Red
Green
Yellow
Yellow
Blue
Yellow
Yellow
Yellow
Green
Green
Yellow
Red
Green
Red
Red
Red
./images1/rot_1.png
    "Red"       "Green"     "Yellow"    "Yellow"
    "Blue"      "Yellow"    "Yellow"    "Yellow"
    "Green"     "Green"     "Yellow"    "Red"
    "Green"     "Red"       "Red"       "Red"

Blue
Yellow
Blue
Yellow
Green
Blue
Blue
Yellow
Red
Red
Blue
Blue
Green
Yellow
Red
Red
./images1/rot_2.png
    "Blue"      "Yellow"    "Blue"    "Yellow"
    "Green"     "Blue"      "Blue"    "Yellow"
    "Red"       "Red"       "Blue"    "Blue"
    "Green"     "Yellow"    "Red"     "Red"

Red
Red
Red
Red
Red
Red
```

```
Red
Red
Yellow
Red
Yellow
Red
Red
Red
Red
Red
./images1/rot_3.png
    "Red"       "Red"    "Red"       "Red"
    "Red"       "Red"    "Red"       "Red"
    "Yellow"    "Red"    "Yellow"    "Red"
    "Red"       "Red"    "Red"       "Red"

Green
Green
Yellow
Red
Yellow
Yellow
Blue
Blue
Blue
Green
Green
Yellow
Green
Yellow
Yellow
Blue
./images1/rot_4.png
    "Green"     "Green"     "Yellow"    "Red"
    "Yellow"    "Yellow"    "Blue"      "Blue"
    "Blue"      "Green"     "Green"     "Yellow"
    "Green"     "Yellow"    "Yellow"    "Blue"

Blue
Red
Green
Yellow
Yellow
Red
Blue
Red
Yellow
Red
Yellow
Red
Yellow
Blue
Yellow
Green
```

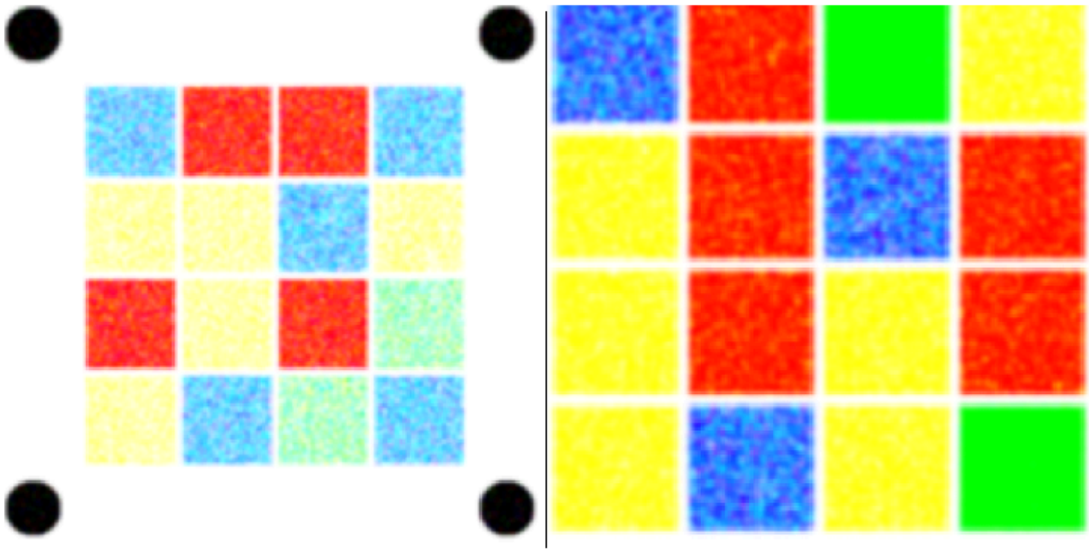
```
./images1/rot_5.png
    "Blue"      "Red"     "Green"     "Yellow"
    "Yellow"    "Red"     "Blue"      "Red"
    "Yellow"    "Red"     "Yellow"    "Red"
    "Yellow"    "Blue"    "Yellow"    "Green"

----
     LastName       Age    Smoker    Height    Weight    BloodPressure
    ____________    ___    ______    ______    ______    _____________

    {'Sanchez'}     38     true        71        176       124     93
    {'Johnson'}     43     false       69        163       109     77
    {'Li'     }     38     true        64        131       125     83
    {'Diaz'   }     40     false       67        133       117     75
    {'Brown'  }     49     true        64        119       122     80
```



./images1/noise$_2$.png

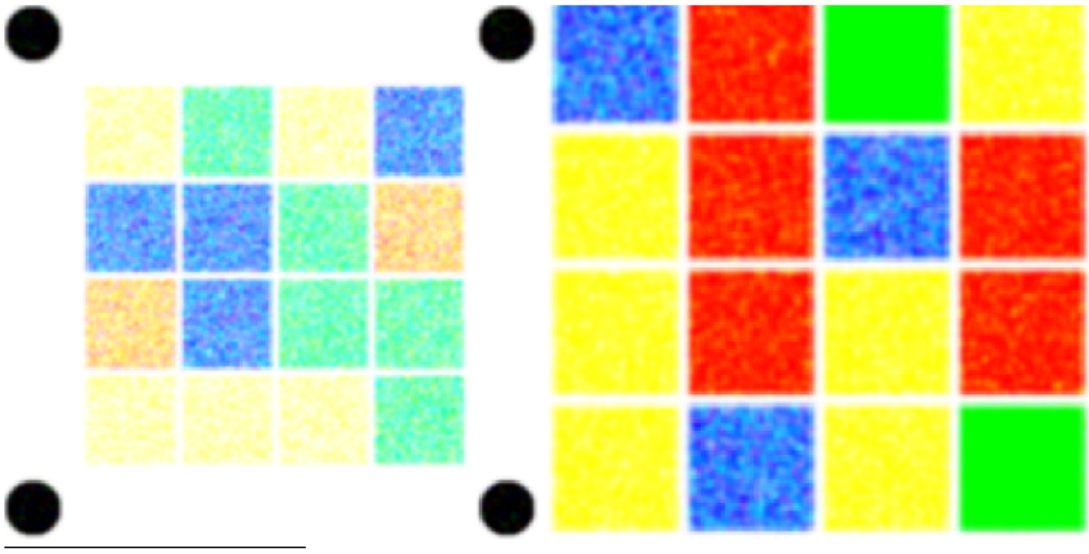


./images1/noise$_3$.png

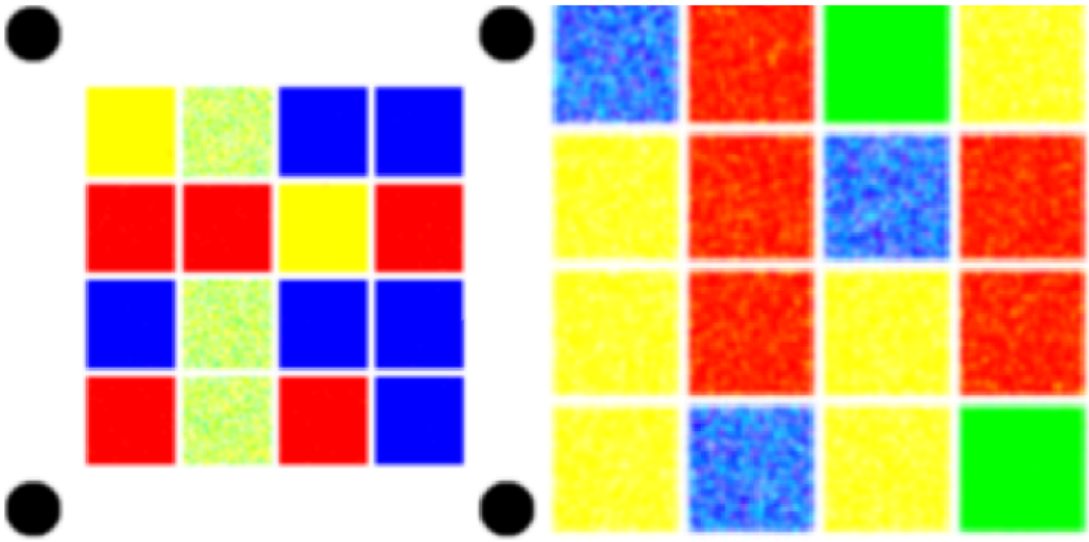


./images1/noise$_4$.png

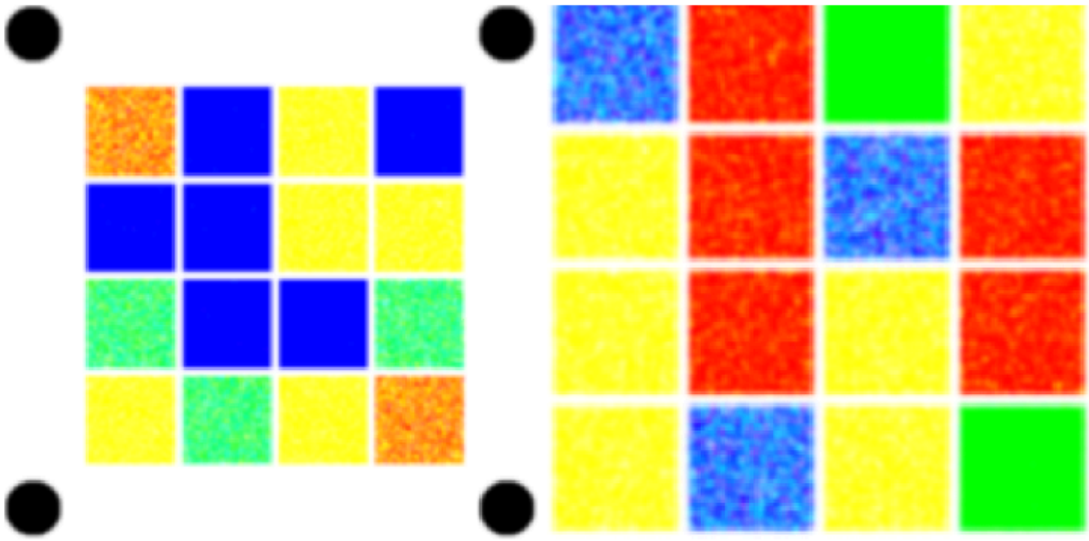
./images1/noise$_5$.png



./images1/org$_1$.png



./images1/org$_2$.png



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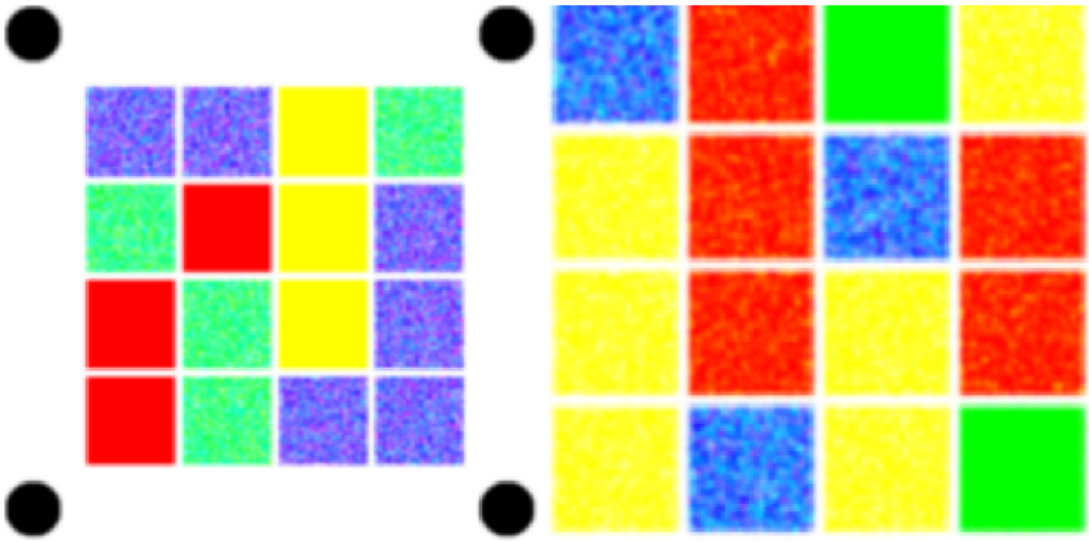
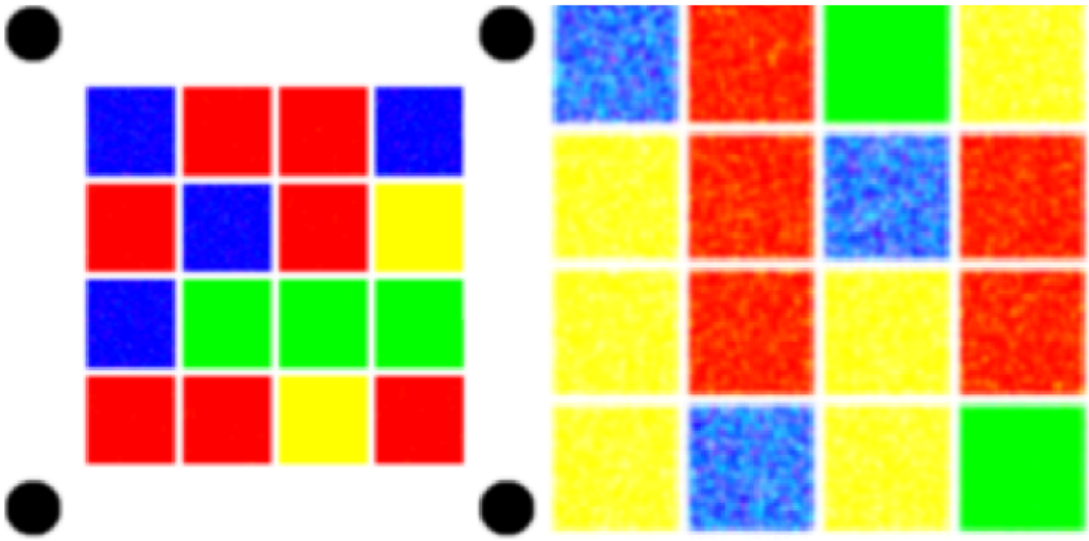
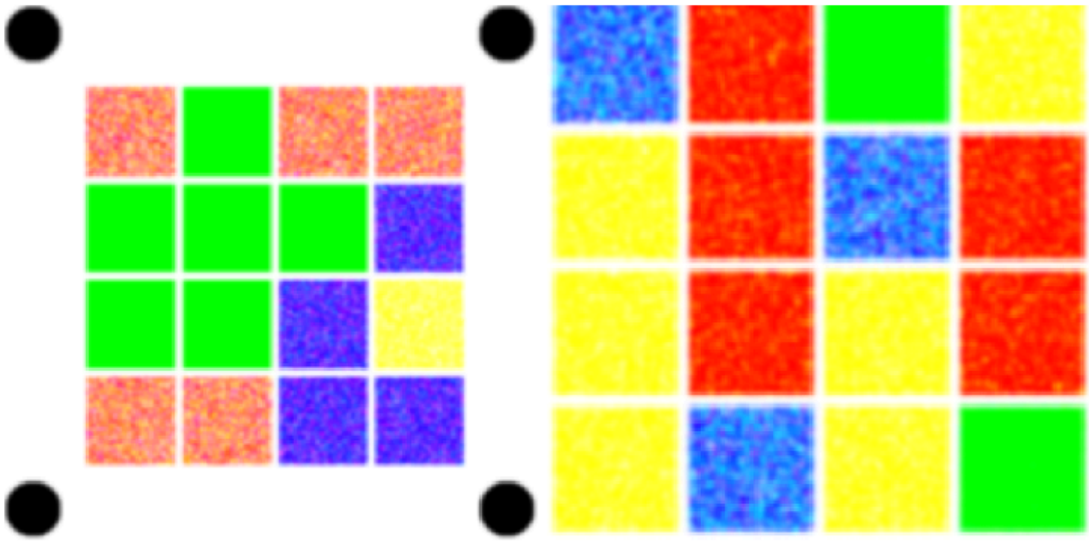


./images1/org$_4$.png



./images1/org$_5$.png



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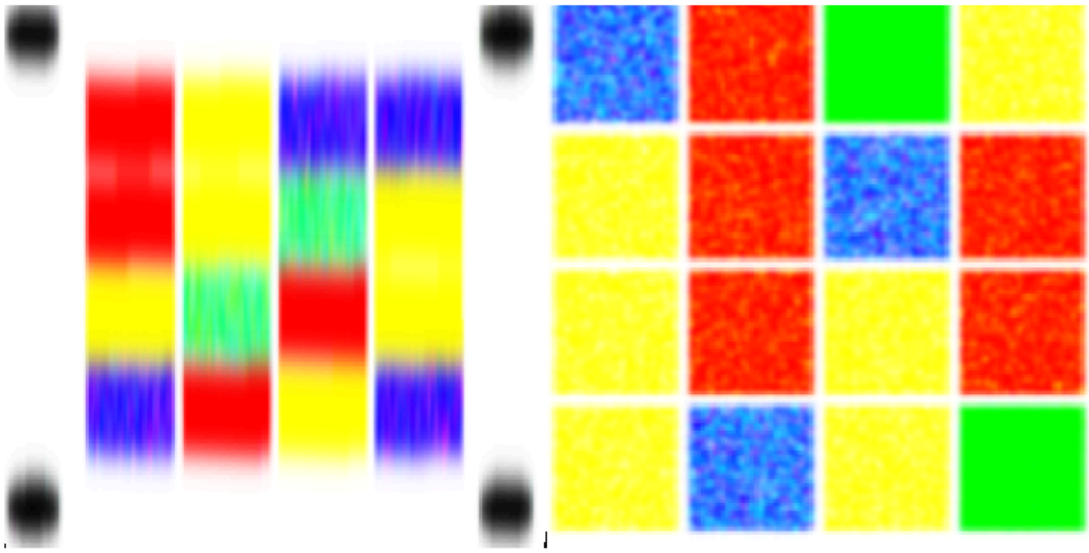
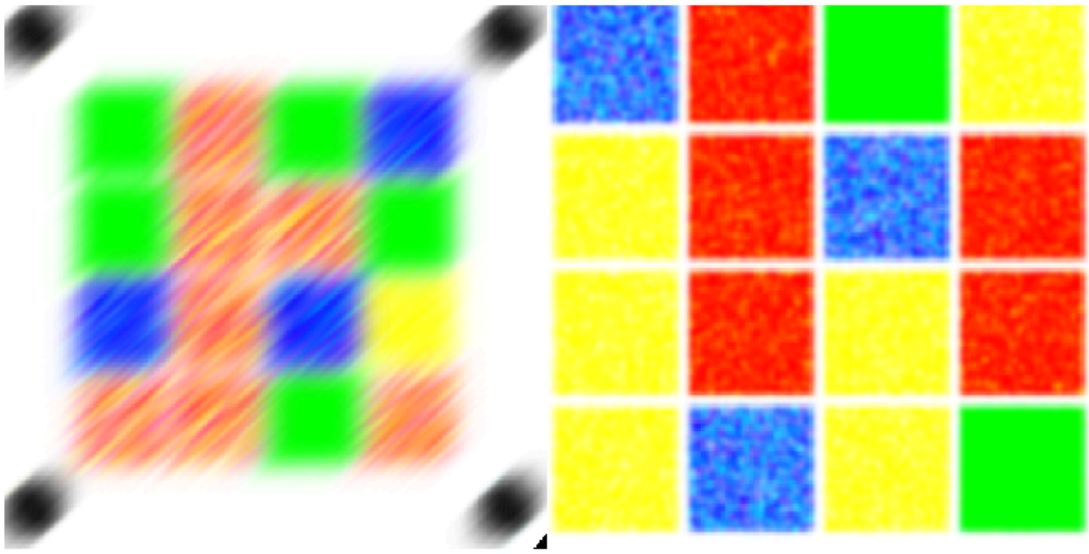
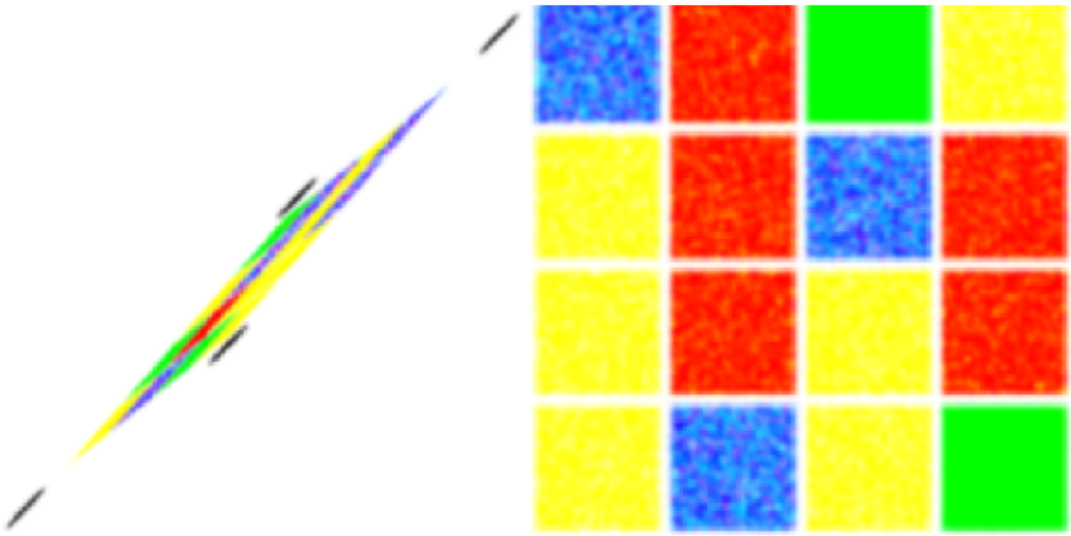


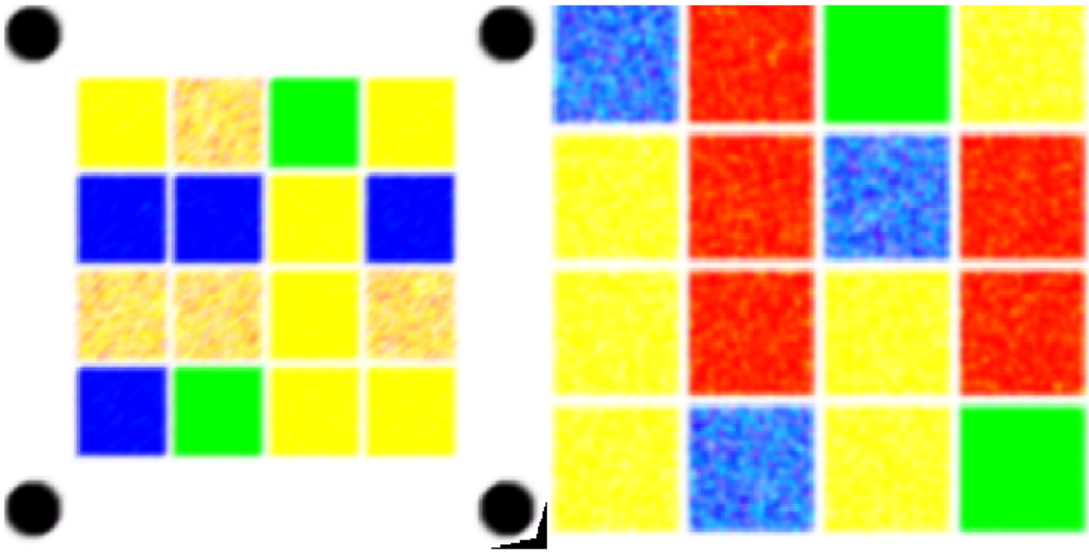
./images1/proj1$_2$.png



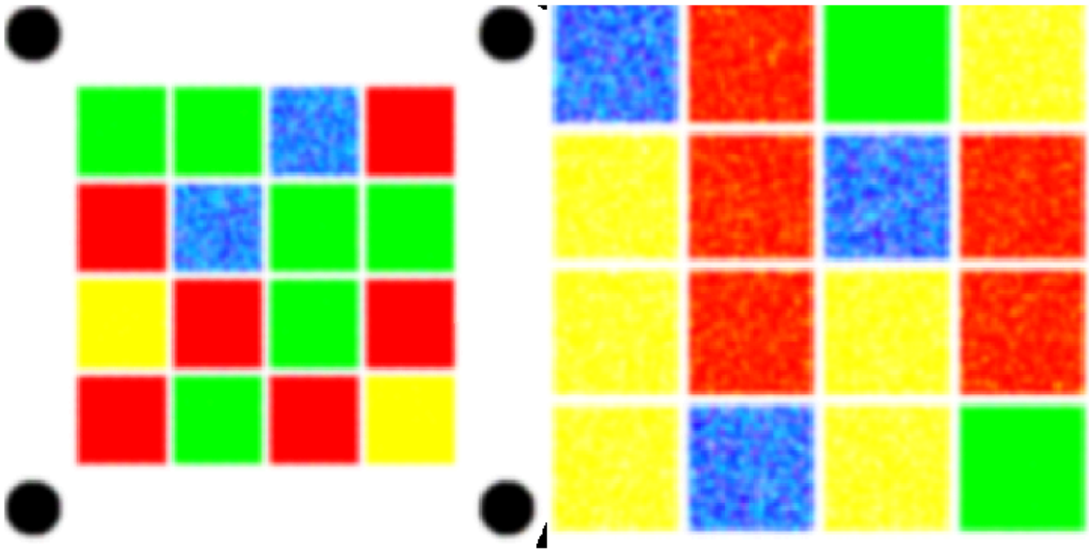
./images1/proj1$_3$.png



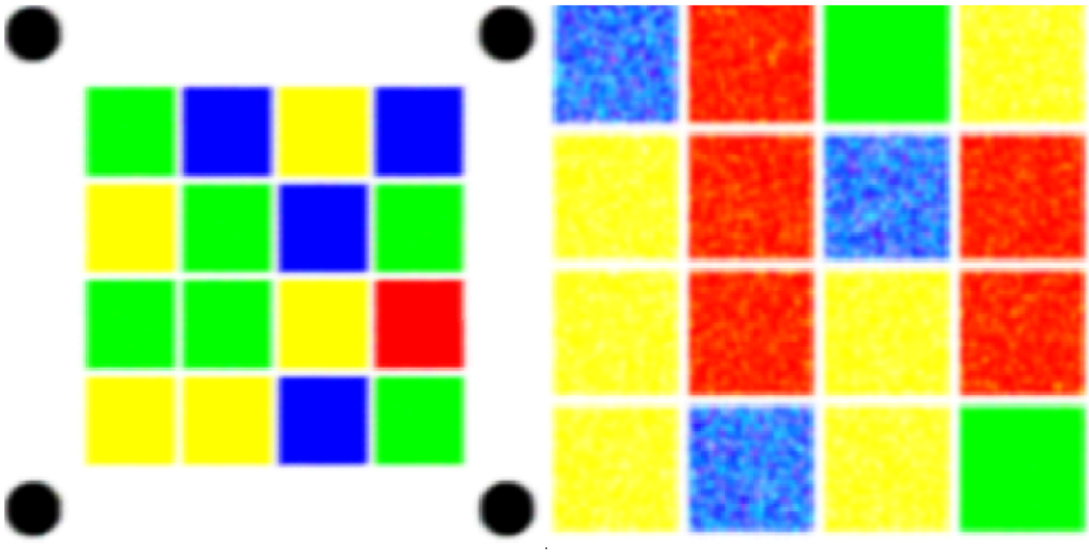
./images1/proj1$_4$.png



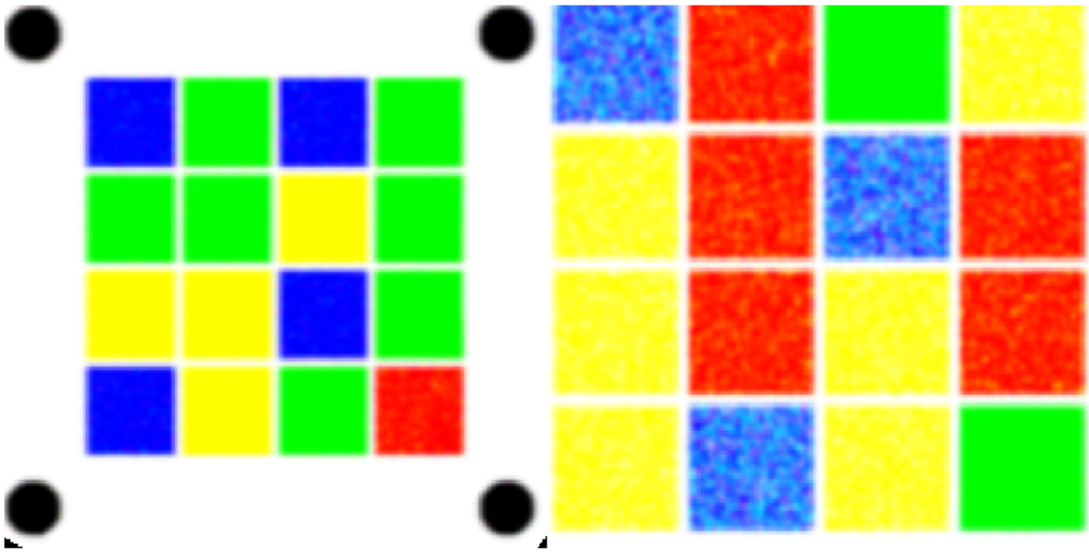
./images1/proj1$_5$.png



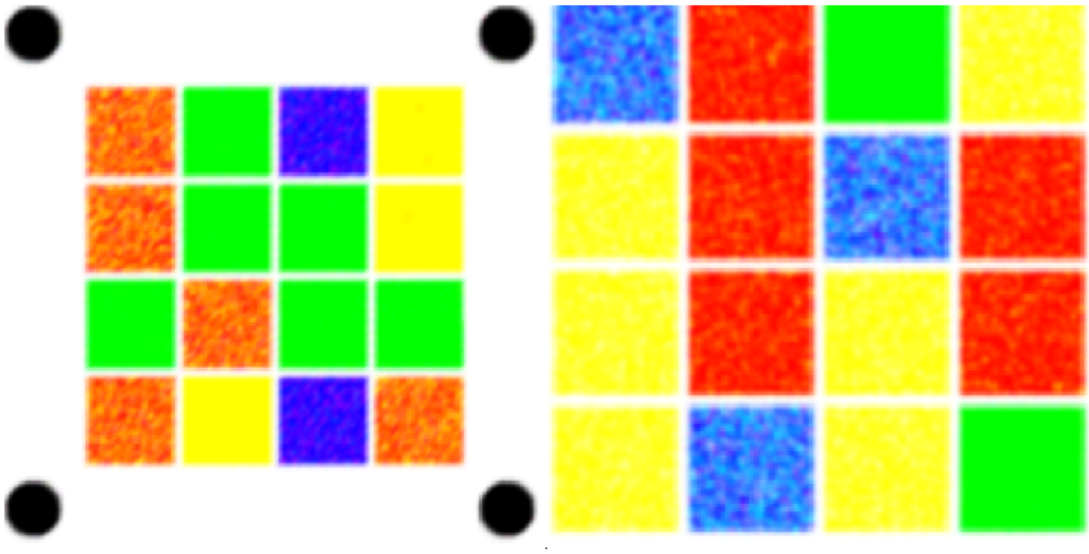
./images1/proj2$_1$.png



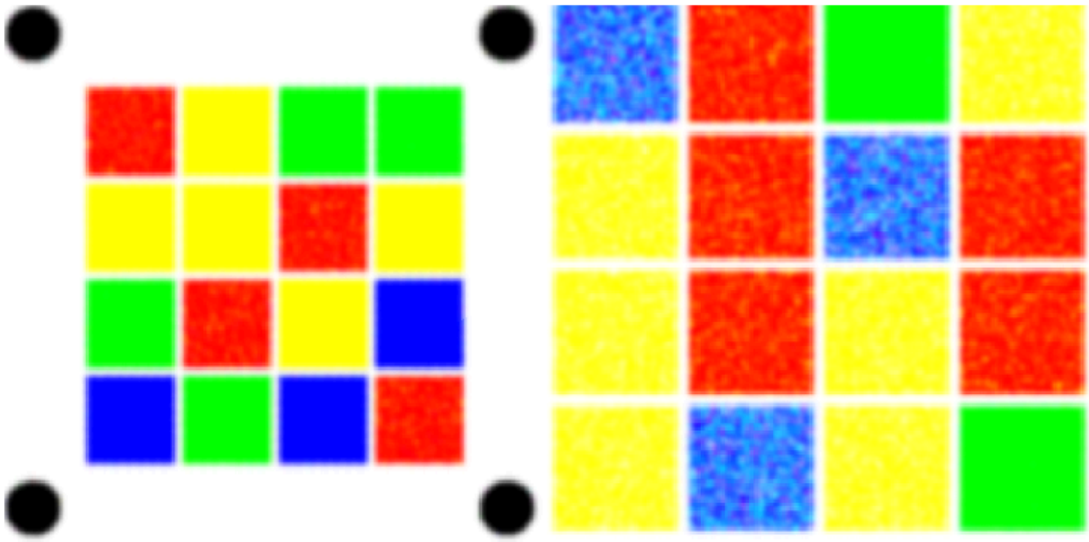
./images1/proj2$_2$.png



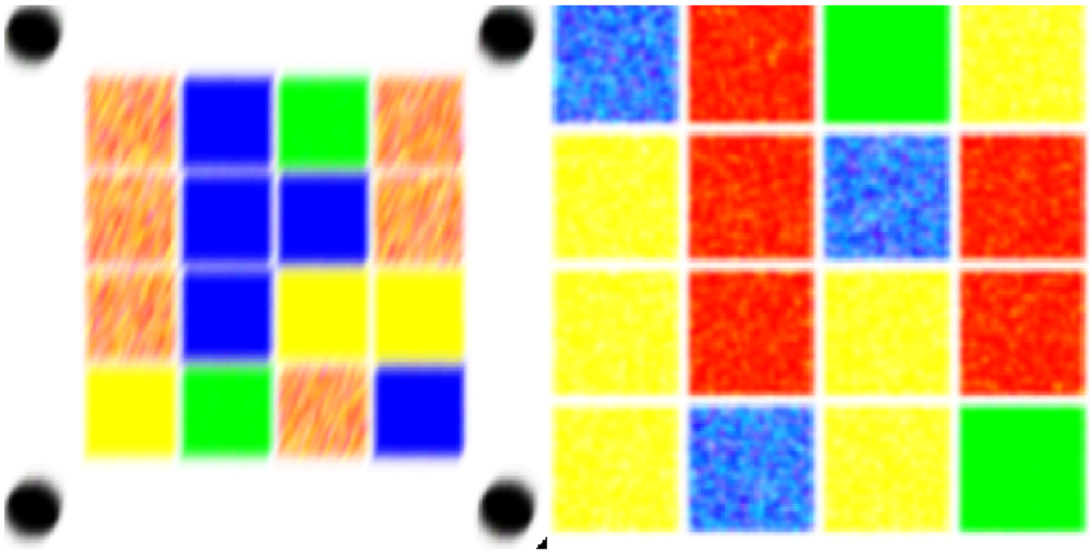
./images1/proj2$_3$.png



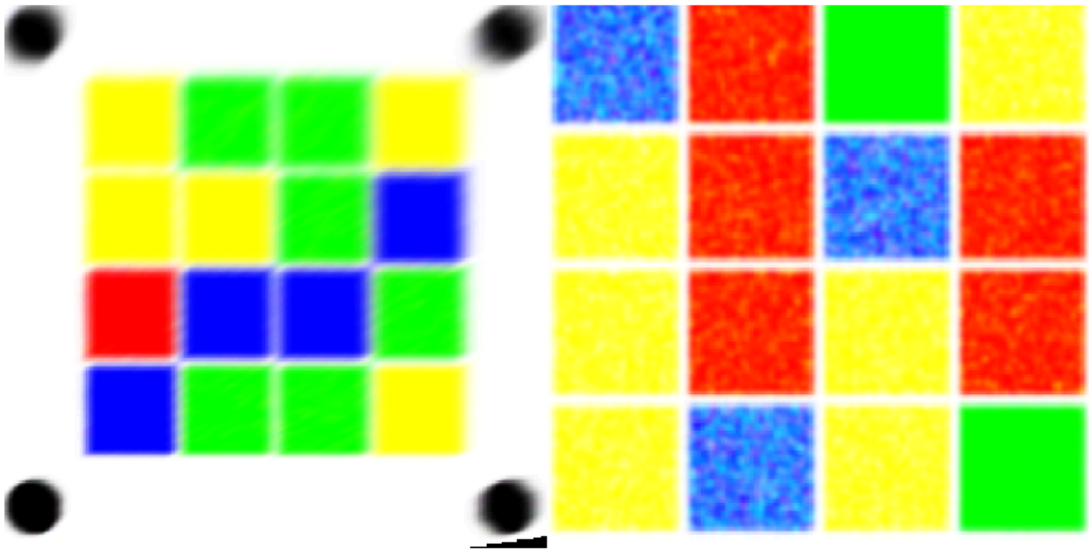
./images1/proj2$_4$.png



./images1/proj2$_5$.png



./images1/proj$_1$.png



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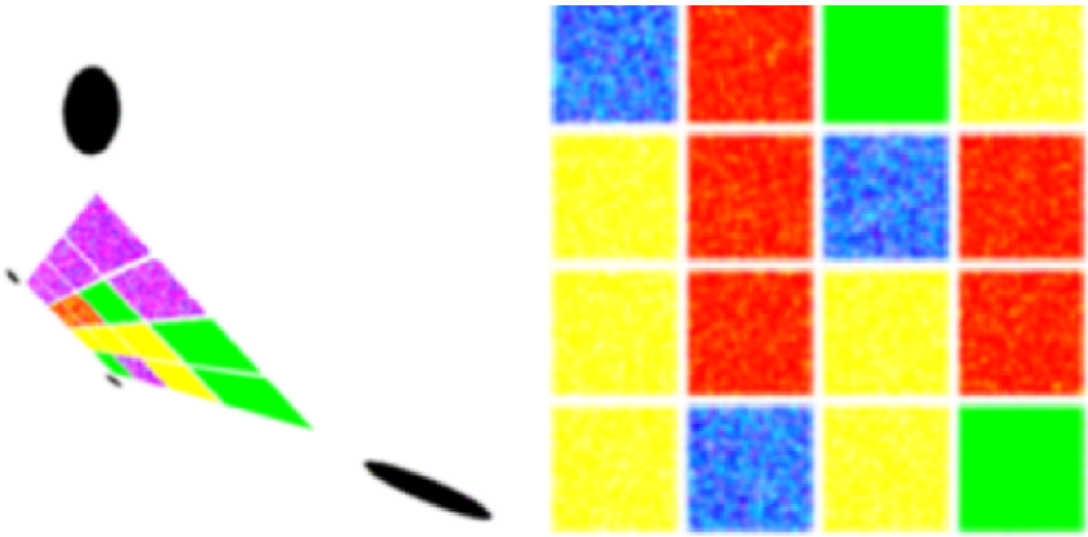
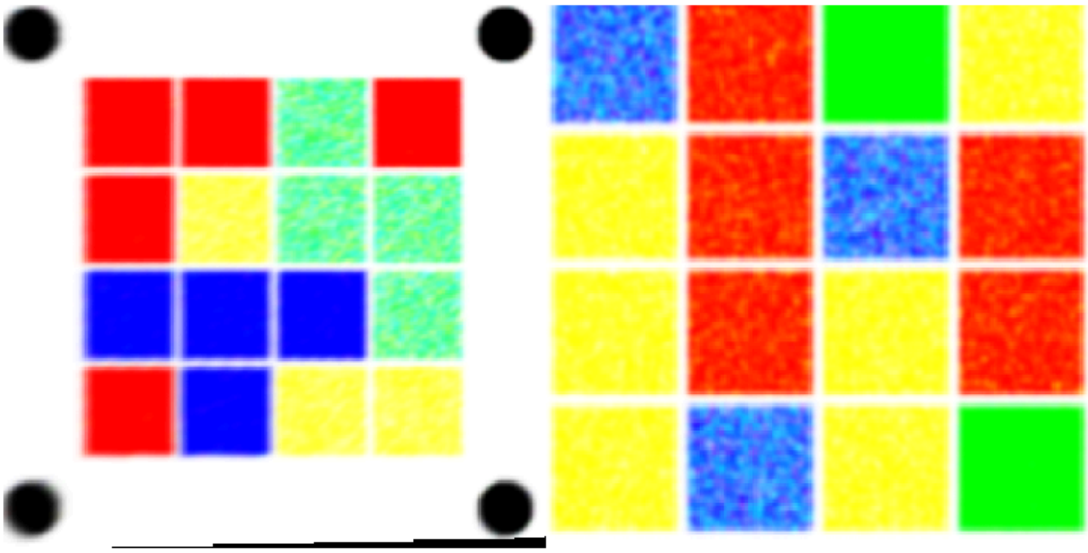


./images1/proj$_3$.png



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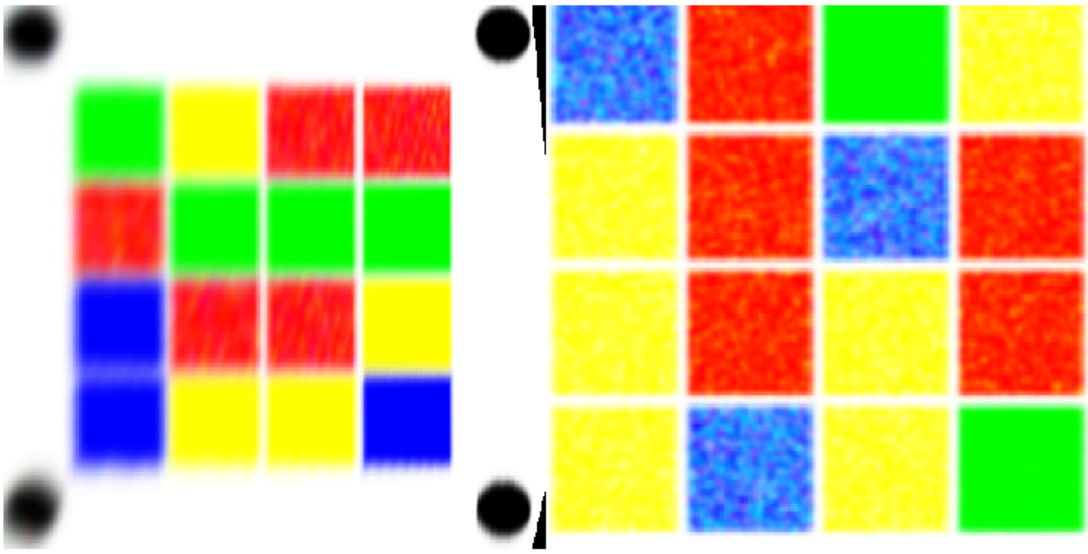

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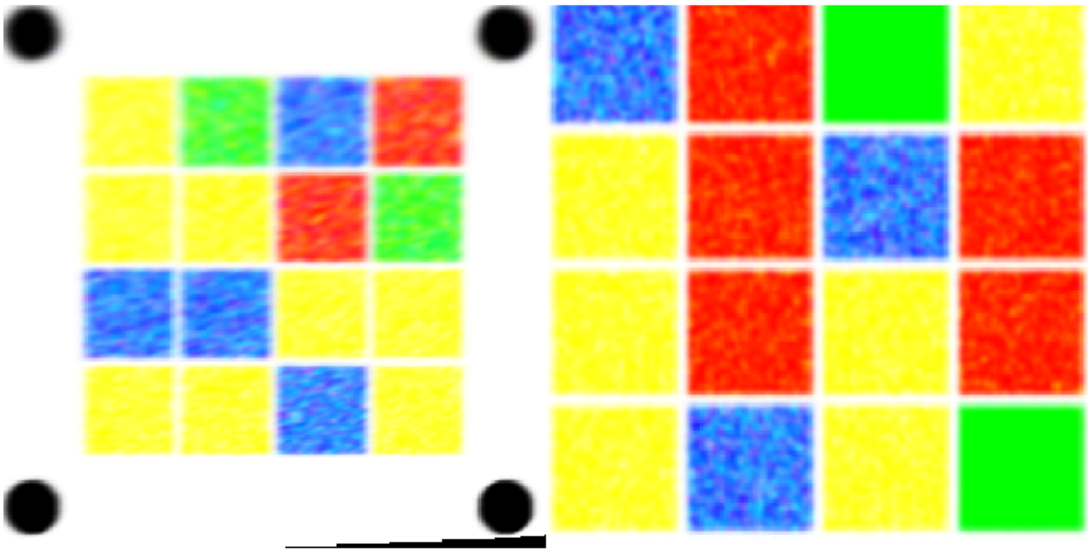

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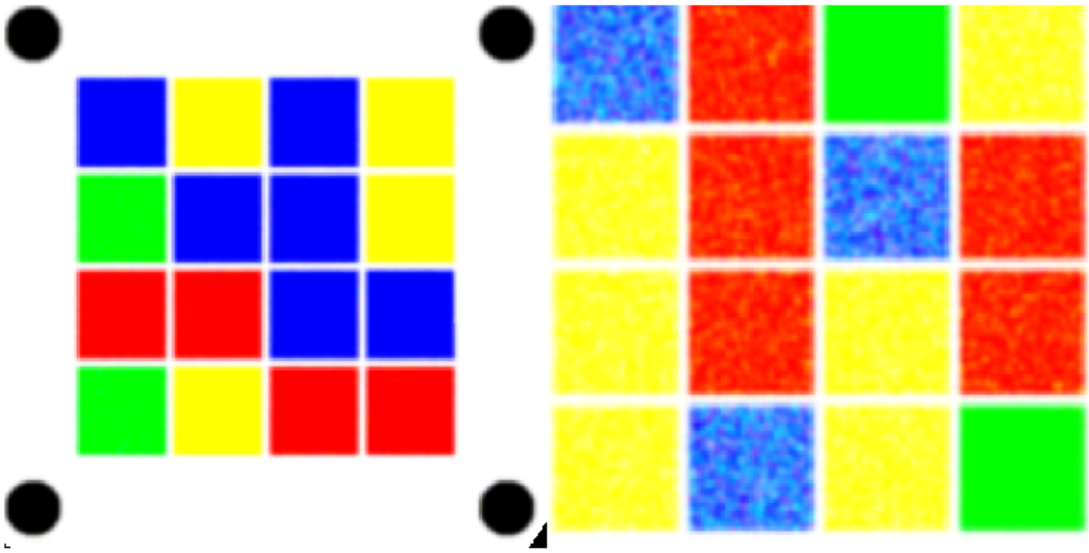

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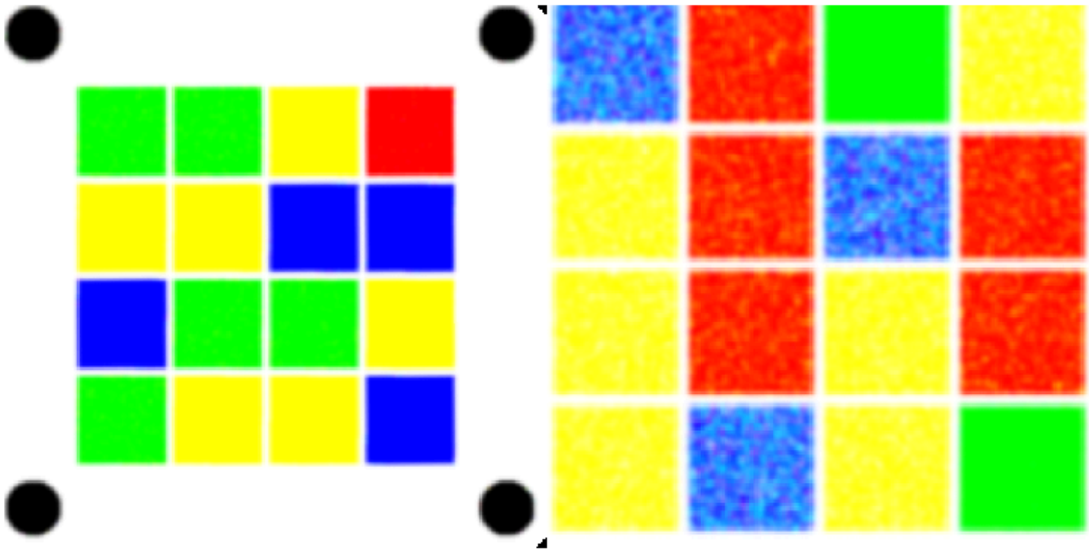

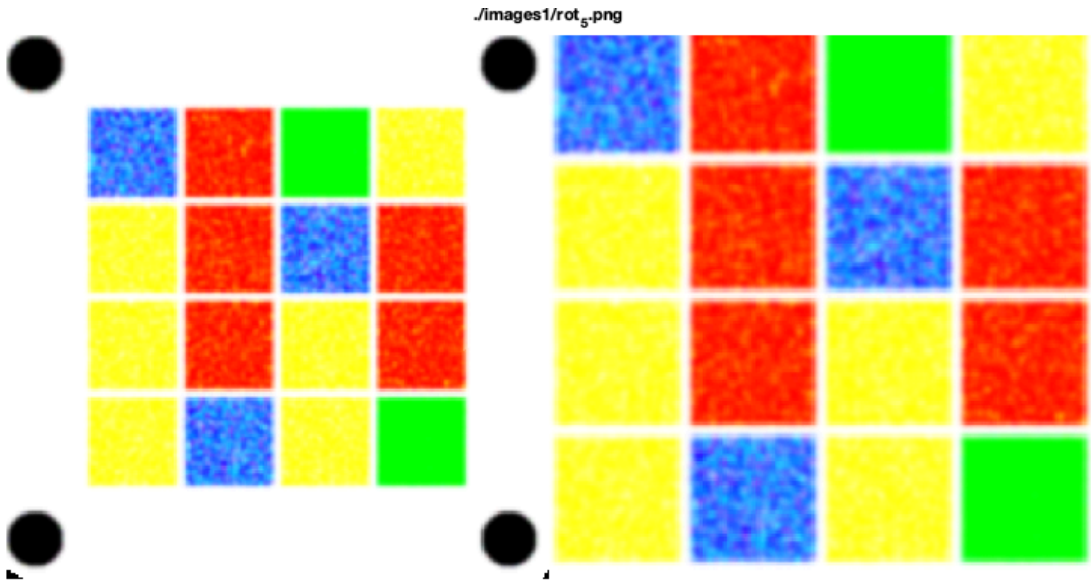

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