
기술 발표

Finger Keyboard

프레C맨 

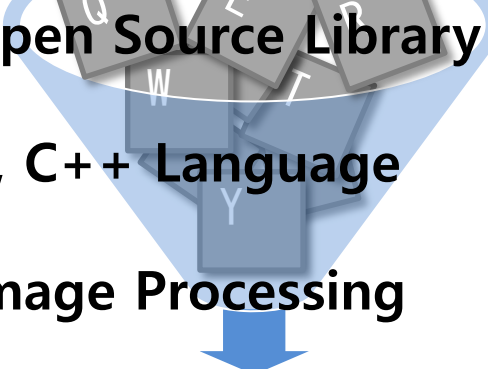
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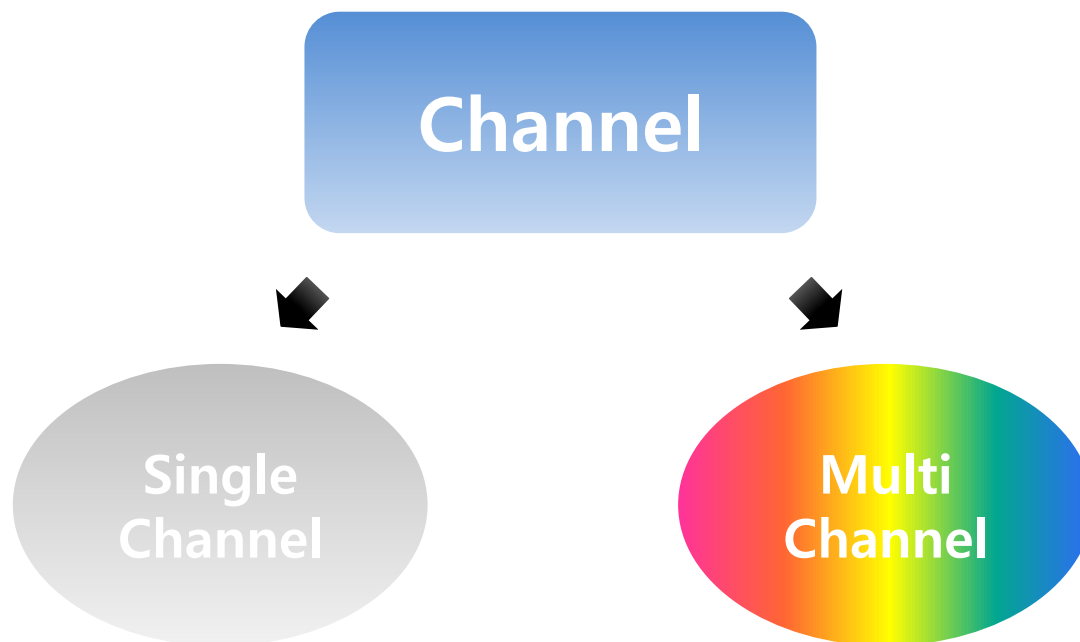






- Open Source Library
 - C, C++ Language
 - Image Processing
 - Computer Vision
- 
- A blue funnel-shaped diagram pointing downwards. Inside the funnel are several grey keyboard keys with white letters: Q, E, R, W, T, and Y. A large blue arrow points from the bottom of the funnel towards the text "Keyboard Filter Driver".
- Keyboard
Filter Driver**



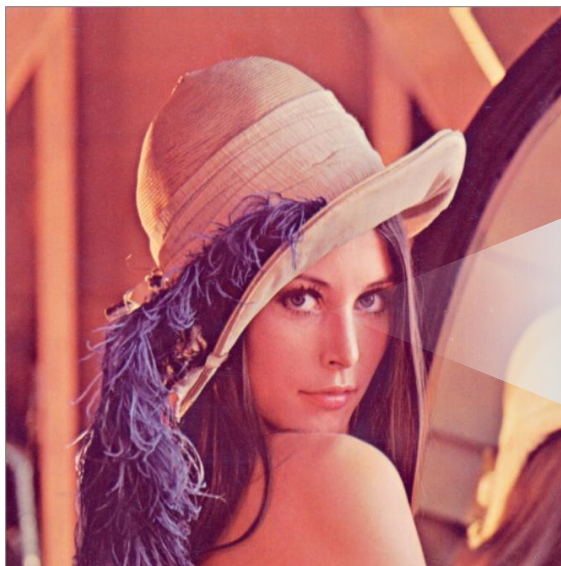




128	127	120	122
100	126	132	135
133	155	150	145
144	155	150	152
160	165	166	162

Gray Scale Image





↓	↓	↓	↓	↓	↓
126	128	130	125	127	129
102	98	100	128	124	126
135	131	133	155	155	155
163	145	143	162	156	154
144	160	157	155	165	168

RGB Color Image



imageData[0]	imageData[1]	imageData[2]
100	120	150
imageData[3]	imageData[4]	imageData[5]
130	140	160

IPL_DEPTH_8U



unsigned 8 bit Integer number

IPL_DEPTH_8S



signed 8 bit Integer number

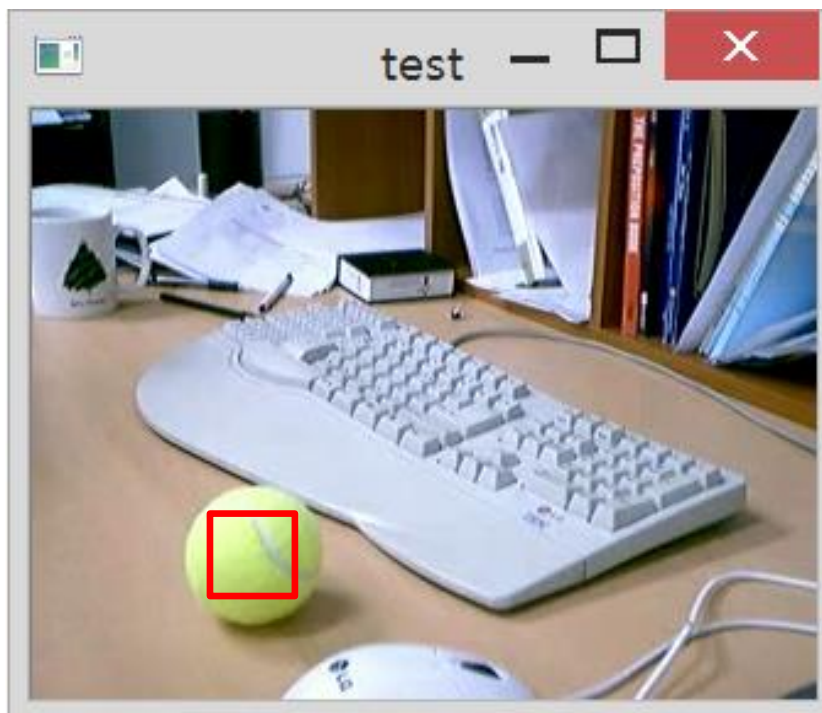
IPL_DEPTH_32F

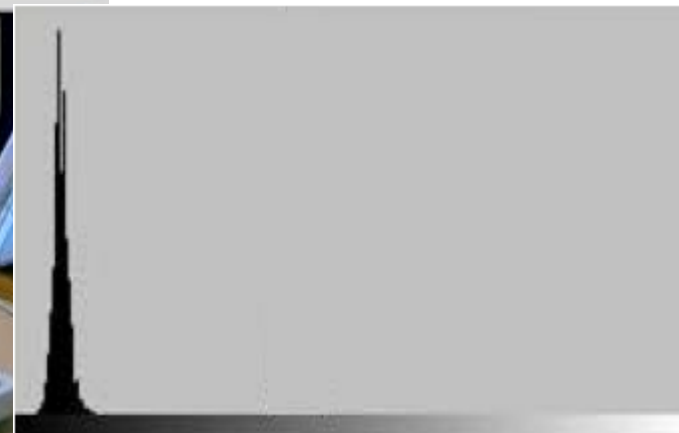
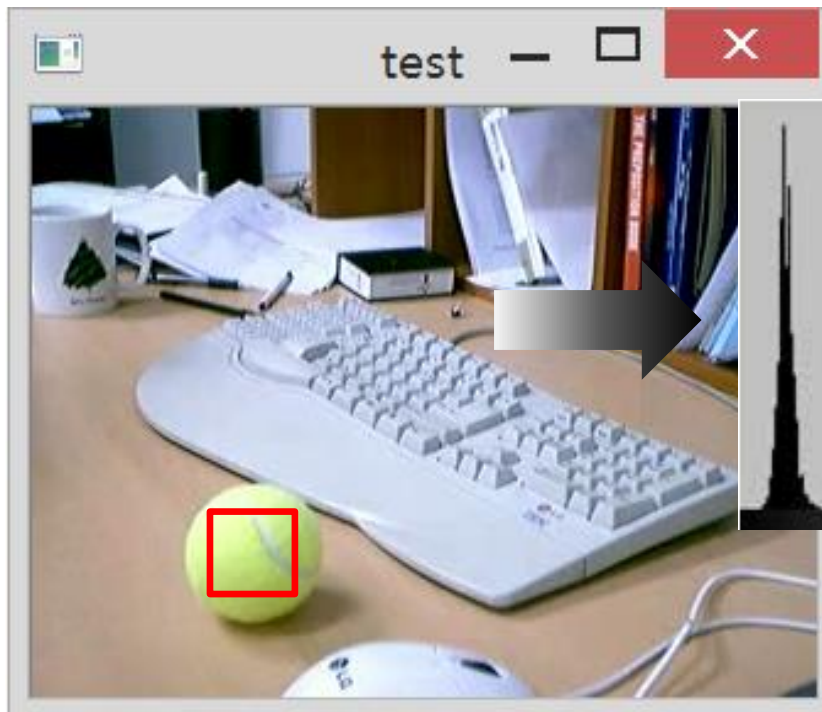


32 bit float number

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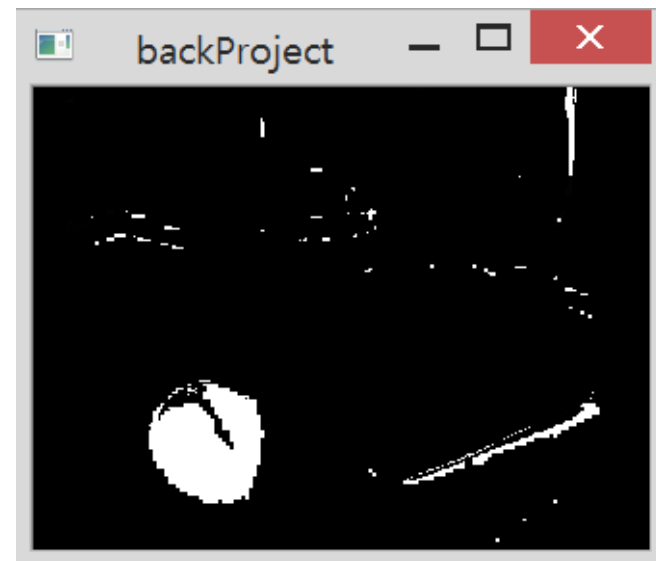


Histogram



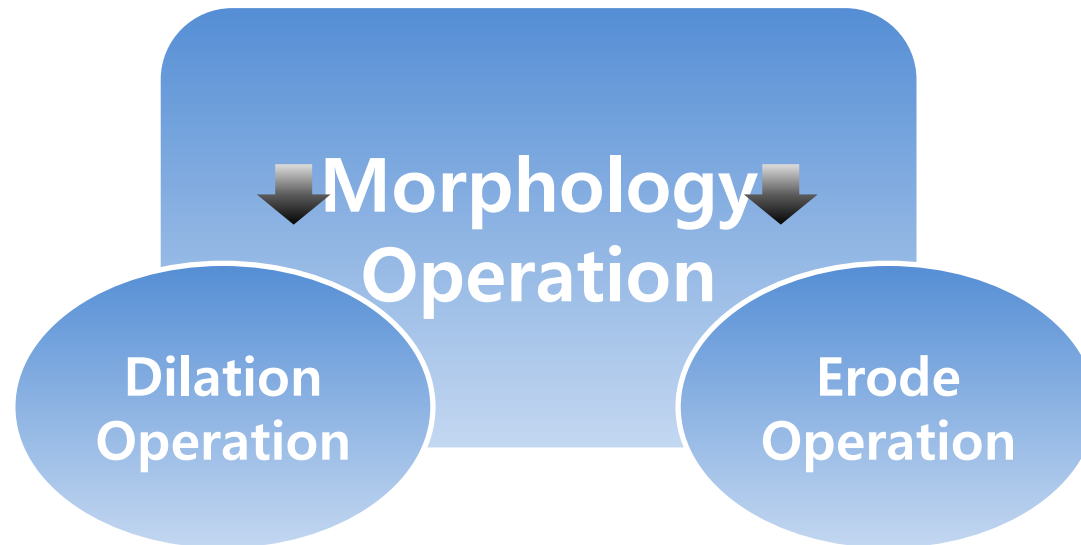


Image

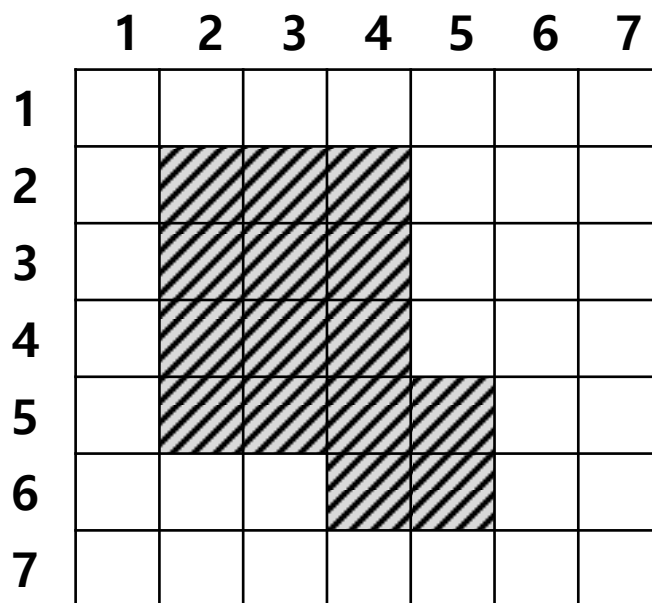


Back Project Image





Dilation
Operation

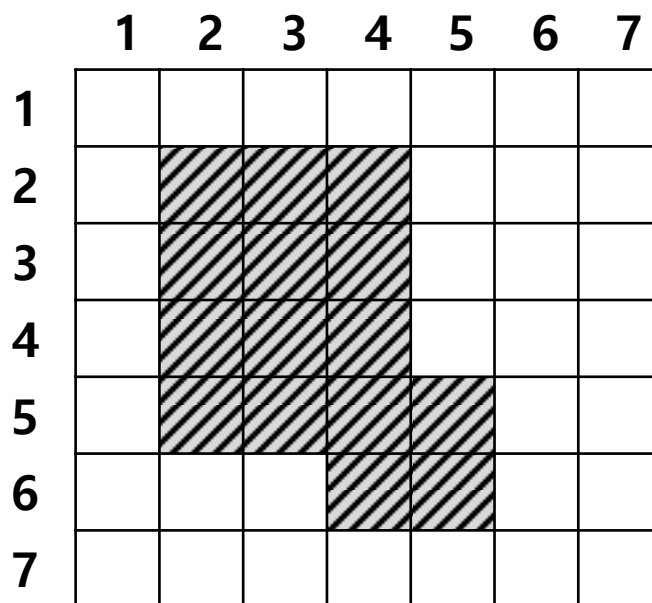


Dilation
Operation

	1	2	3	4	5	6	7
1							
2							
3							
4							
5							
6							
7							



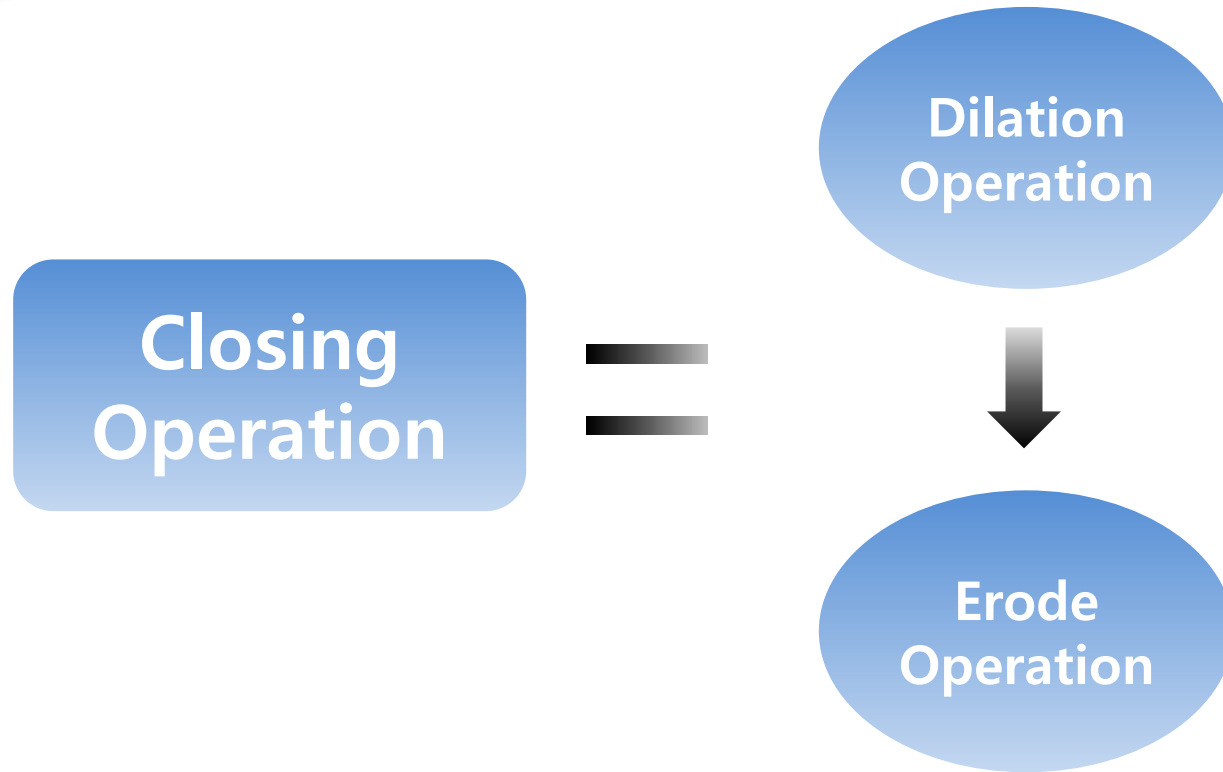
Erode
Operation

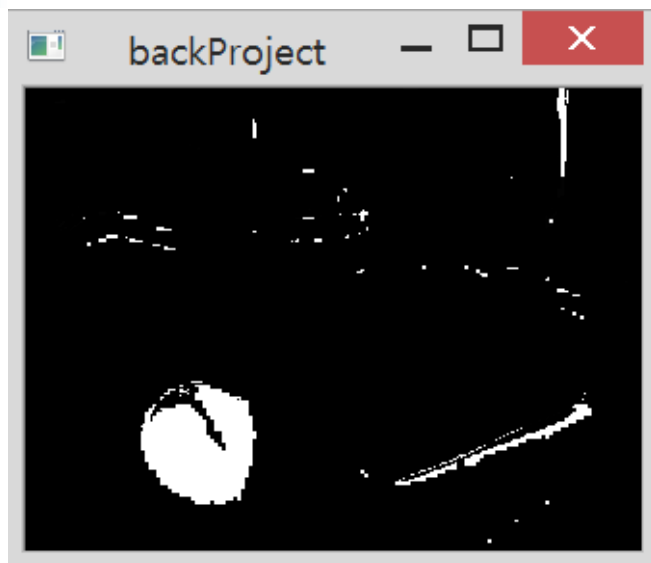


Erode
Operation

	1	2	3	4	5	6	7
1							
2							
3							
4							
5							
6							
7							







Back Project Image



Closing Operation



Mean Shift

- **Center**

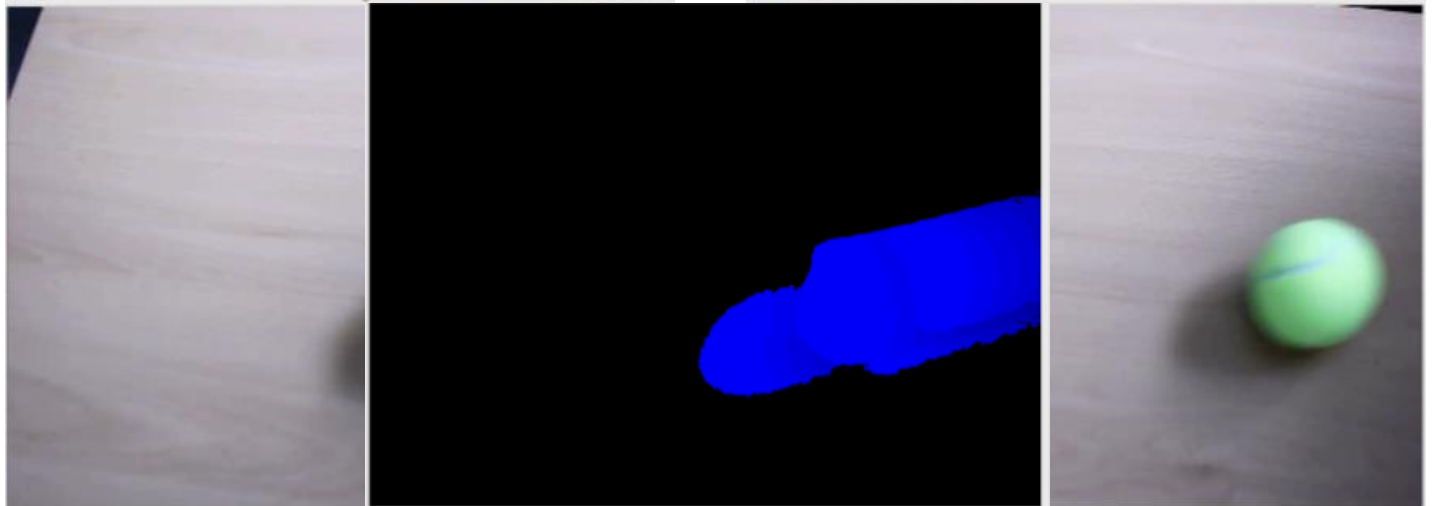
Cam Shift

- **Center**
- **Size**
- **Orientation**



- `cvCamShift()` 함수를 이용한 물체 추적





Current Image Silhouette Image Previous Image



Motion
History Image



Update

Silhouette
Image



- cvCalcGlobalOrientation() 함수를 이용한 움직임 검출

