# Color checker 가이드라인

- 어안렌즈 = ColorChecker 와 렌즈 사이 10cm 간격,
  Aperture M1 (카메라 조리개 값),
  minArea =0.4, maxArea = 80, (json 안에 있음)
  kBlocksize = 17, kWeightedSub = 1
  (ColorCalibration.cpp 539 줄)

- 일반렌즈 = ColorChecker 와 렌즈 사이 20cm 간격,
  minArea =0.4, maxArea = 80, (json 안에 있음)
  kBlocksize = 17, kWeightedSub = 1
  (ColorCalibration.cpp 539 줄)

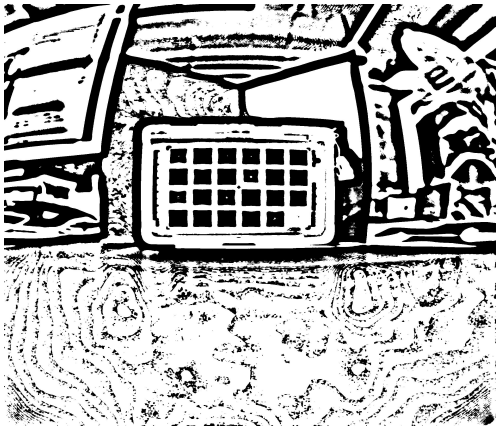
- bw 이미지가 정확히 안나온다면,
  Adaptive thresholding (kBlocksize, k WeightedSub) 파라미터 변경
  (뒷페이지 참조)

- bw 이미지가 잘 나왔는데 패치를 못 찾는다면,
  Contour 에서 필터링 된 것, min,max PatchArea 변경 (json 안에서 설정)

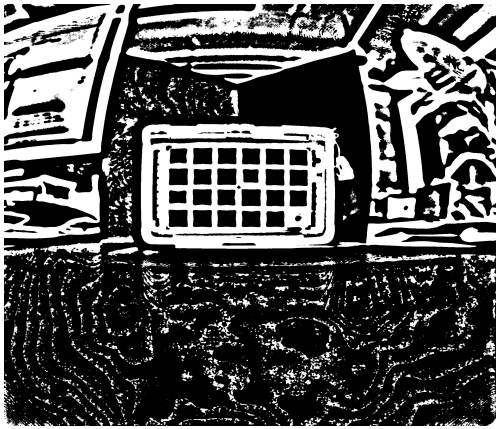
# Adaptive thresholding() - kWeightedSub (낮을수록 흰색 영역 강화)

ColorCalibration.cpp > 540줄

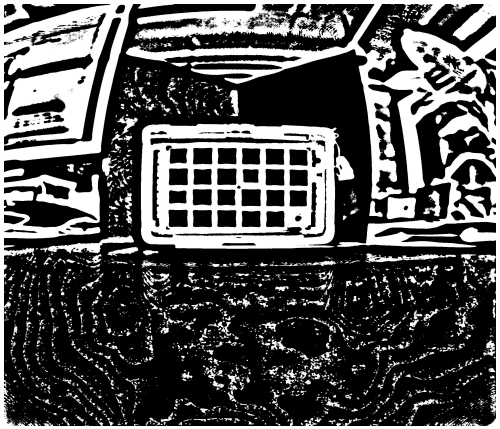
0.5



1



1.5



2

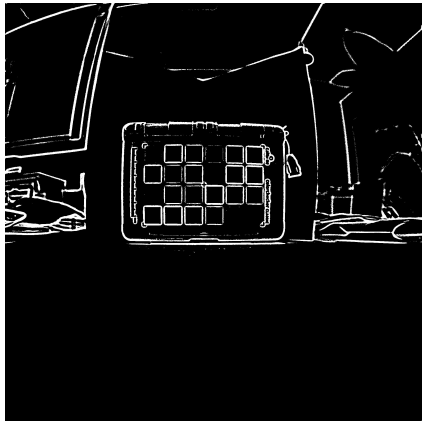
3

4

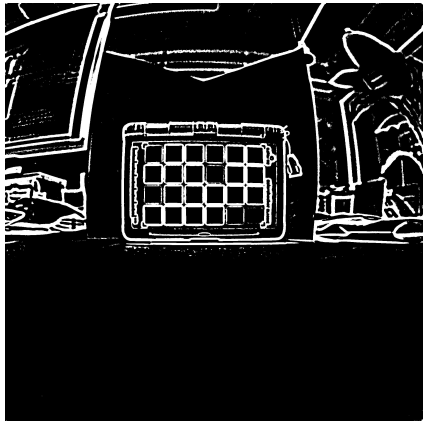
# Adaptive thresholding() - kBlockSize (높을수록 흰색 영역 강화)

ColorCalibration.cpp > 539줄

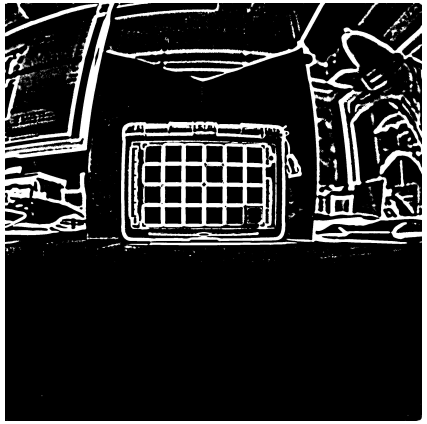
9



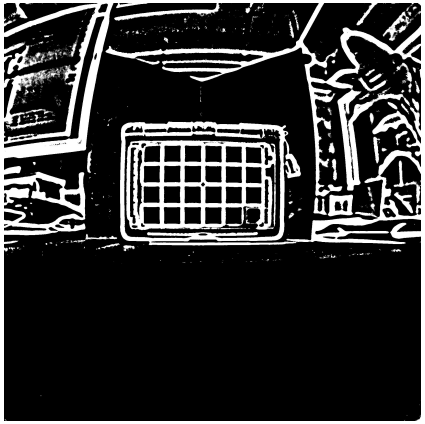
19



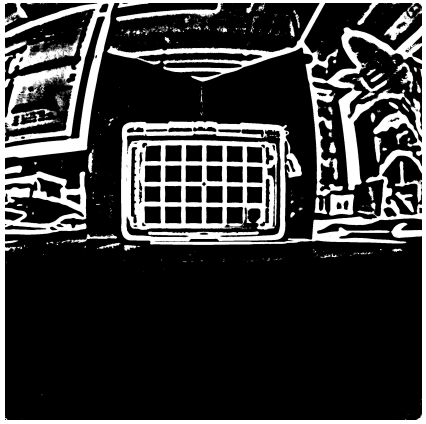
29



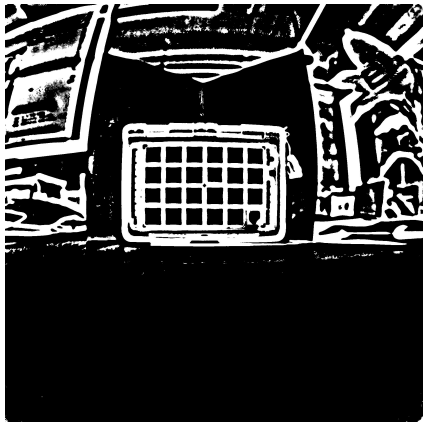
39



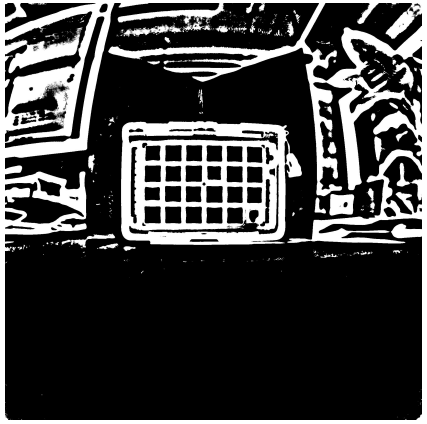
49



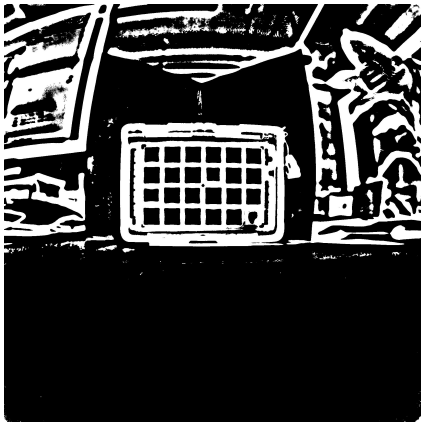
59



69



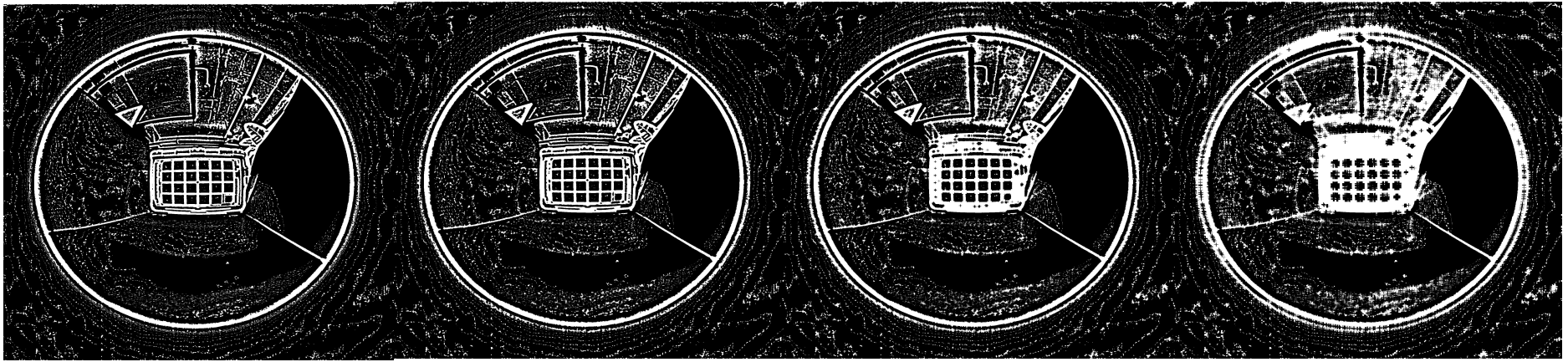
71



# fillGaps() - kScaleElement (높을수록 흰색 영역 강화)

ColorCalibration.cpp > 561줄

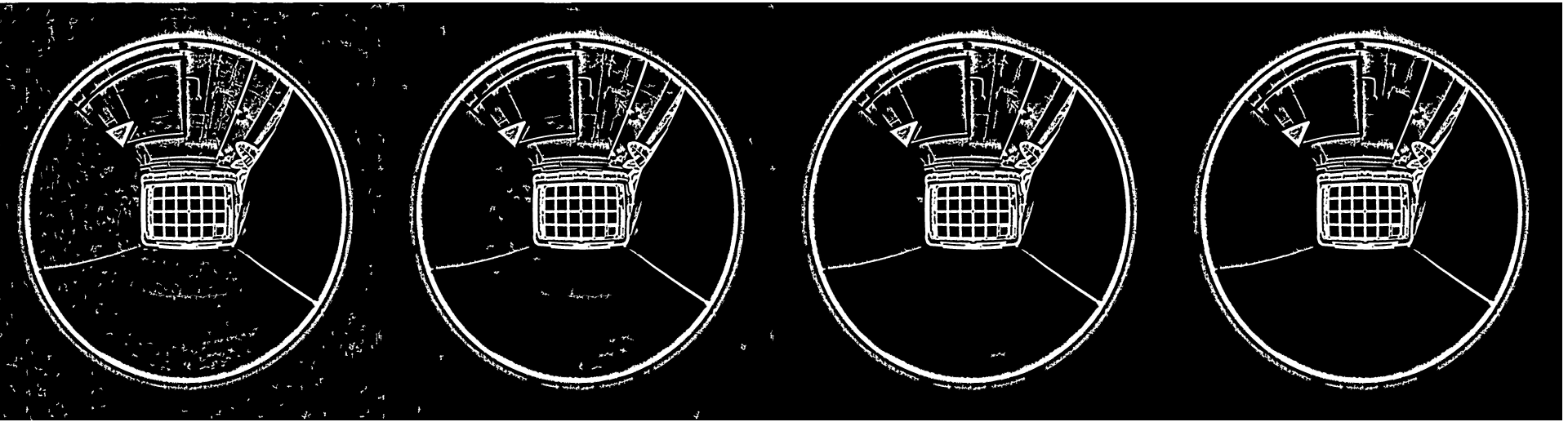
5 10 20 30



# removeSmallObjects() - kScaleSmallestObject (낮을수록 흰색 영역 강화)

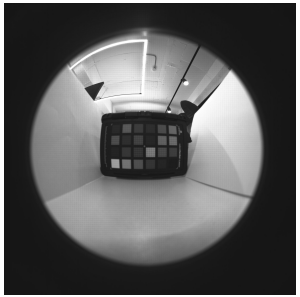
ColorCalibration.cpp > 569줄

0.1 0.3 0.6 0.9

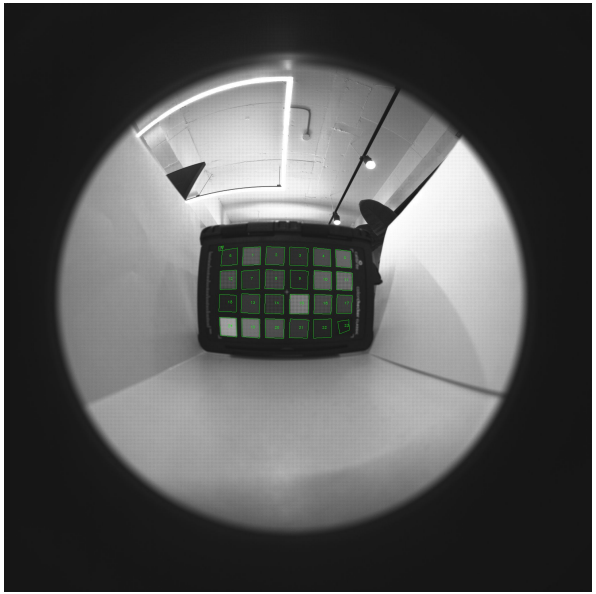


# detectColorChart() - min,maxAreaChart (contours 에서 최종 필터링하는 사이즈)

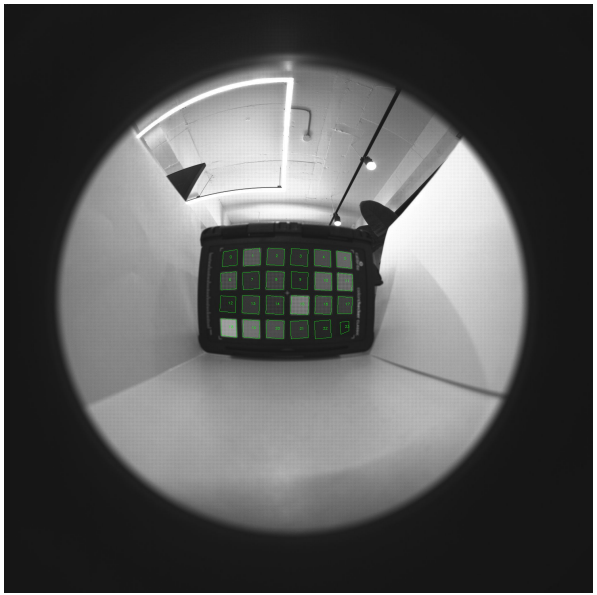
TestColorCalibration.cpp > 123줄 인자



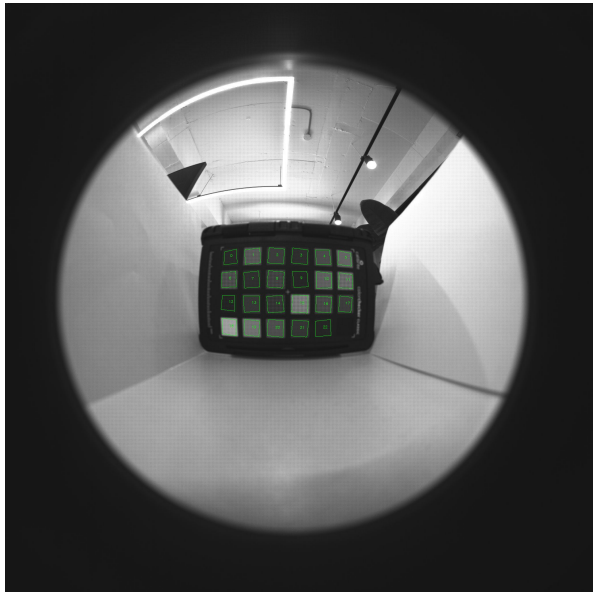
0.1 / 80



0.3 / 80



0.5 / 80



# ML based 방법도 있음
# https://github.com/collinswakholi/ML_ColorCorrection_tool

detection

CCM