**교육일지**

**교육 제목 : 비전**

**교육 장소 : YGL C6 강의실**

**교육 일시 : 2021/11/17**

**동영상처리**

**cap = cv2.VideoCapture('fig/PETS2000.avi')**

**\_, bg = cap.read()**

**bg = cv2.cvtColor(bg, cv2.COLOR\_BGR2GRAY)**

**bg = cv2.GaussianBlur(bg, (0, 0), 1.0)**

**fbg = bg.astype(np.float32)**

**if not cap.isOpened():**

**print('Video open failed')**

**cap.release()**

**sys.exit()**

**while True:**

**ret, frame = cap.read()**

**if not ret:**

**print('Video open failed')**

**break**

**frame\_gy = cv2.cvtColor(frame, cv2.COLOR\_BGR2GRAY)**

**frame\_gy = cv2.GaussianBlur(frame\_gy, (0, 0), 1.0)**

**fframe\_gy = frame\_gy.astype(np.float32)**

**# print(type(frame\_gy))**

**# accumulateWeighted(src, dst, alpha, mask) -> dst**

**# src: 입력영상**

**# dis: 출력영상 (32bit, 64bit)**

**# alpha : 축적가중치**

**# mask: 마스트 영상**

**cv2.accumulateWeighted(fframe\_gy, fbg, 0.005, None)**

**bg = fbg.astype(np.uint8)**

**diff = cv2.absdiff(bg, frame\_gy)**

**thre, diff\_binary = cv2.threshold(diff, 30, 500, cv2.THRESH\_BINARY)**

**cnt, labels, stats, area = cv2.connectedComponentsWithStats(diff\_binary)**

**for i in range(1, cnt):**

**x, y, w, h, area = stats[i]**

**if area < 100:**

**continue**

**cv2.rectangle(frame, (x, y, w, h), (0, 0, 255), 2)**

**cv2.imshow('frame', frame)**

**cv2.imshow('back', bg)**

**cv2.imshow('diff', diff)**

**cv2.imshow('diff\_binary', diff\_binary)**

**if cv2.waitKey(30) == 27:**

**break**

**cap.release()**

**cv2.destroyAllWindows()**