

(Syllabus)

2023

2

(Course Name)							(Language)	
	COMPUTER VISION							
(Course No. - Class)	21102528 - 001		(Major)					
/ / (Credits/Theory/Practice)	3/2.0/2.0		/ / (Day/Time/Classroom)		13:00 - 14:50 (105)			
(Method)			(Type)					
(Specialty Competencies)	, , SW , SW							
(Compency)		40 %		%		%		60 %
		%		%		%		%

(Professor)

(Name)	(Department)	(Personal Number)	(Office Number)	E - Mail
		010 - 5037 - 3452		bg.kim@sm.ac.kr

1. (Course Description & Objective)

1) (Course Description)

- Deep learning 가 .
가 가
- OpenCV 4.4.x
- PBL Hand gesture , , ,
- ()
- Anaconda Keras (tensorflow) deep learning Neural Network

2) (Course Objective)

- deep learning
- OpenCV
- Keras Deep learning (CNN) / /

2. (Course Resources)

Seminar ()	Presentation ()	Q&A (V)	Special Lecture ()	Field Trip ()	Handouts ()	Audio Video TV ()	Team Teaching ()
/ Discussion (V)	Small Group ()	Problem Solving ()	/ / Experiment Practice (V)	Case Study ()	Computer Assisted (V)	OHP Slide (V)	Other ()

- ()

API

3. (Main Textbooks & References)

1) (Textbook)

- OpenCV 2 Computer Vision Application Programming Cookbook - Robert Laganière (가)
- OpenCV () - 가
- ()

2) (Reference)

OpenCV ,

4. (Assigned Books)

가 .OpenCV ()..0000

Robert Laganière.OpenCV 2 Computer Vision Application Programming Cookbook..0000

5. (Assignments)

Assignment	(No. of Times)	(Due Week)	Weighing (%)	Contents	Method
C++	0		0.0	C++	

	0		0.0	open CV	
	0		0.0		
	0		0.0		
	0		0.0		

- (Additional Explanation for assignments)

6. 가 (Grading Policy)

가 (Method of Evaluation)	가 (No. of Times)	가 (Content of Evaluation)	(100%) (Weighing)
		가?	10.0
		OpenCV SW 가? 가?	25.0
		Open SW 가? 가?	35.0
		가?	20.0
		alpha) , , (+	10.0
			0.0
			0.0
			0.0

가 1/4 F .

- (Notes) 가 (Evaluation Category)

가

7. (Consultation for Students Taking the Course)

/ / .

8. , , (Weekly Schedule)

(Week)	(/ /) (Theme)	(Method)	() (Pages)
1	- · (read map) · ? · : OpenCV including extra module	: 2 : 2	
2	- · · - OpenCV : · SW ·	: 2 : 2	1 /
3	- - · · API - API	: 3	2 /
4	- · - API · Mean-Shift - · · () - API	: 2 : 2	3 /
5	- · , , · · Hough - AIP · hough ·	: 2 : 2	4 /
6	- · · : Harris corner, SURF · - API ·	: 2 : 2	Sub 5 / : Hand gesture (1)
7	- · · ·	: 2 : 2	6 /

8	:	: 2	
9	<ul style="list-style-type: none"> - Deep learning Basics(1): . Neural Network () . Single/Multi-layer Perceptron 	: 2 : 2	Sub 7 : - (2)
10	<ul style="list-style-type: none"> - Deep learning Basics(2): . Error correction learning rule () . Deep learning frameworks . Back-propagation Algorithm 	: 3 : 1	8
11	<ul style="list-style-type: none"> - Deep learning Basics(3): . Anaconda 3 Keras . Keras deep learning framework . Keras deep learning programming : mnist . Keras deep learning programming 	: 3 : 1	10 /
12	<ul style="list-style-type: none"> - Deep learning Basics(4): . Tensorflow . Python 	4	
13	<ul style="list-style-type: none"> - Deep learning Basics(4): . (transfer learning) . deep learning (CNN) . 	: 1 : 3	
14	<ul style="list-style-type: none"> - Deep learning Basics(5): . Object Detection . AutoEncoder . Object Autoencoder 	: 0.5 : 3.5	
15	:	: 2~3	Q&A