Syllabus of Spring Semester, 2019

Course Title	Advanced Robot Vision	Course Code	EB71448	Section	001
Department	Computer Engineering	Level	All	Credit - Theory - Practice	3.0 - 3.0 - 0.0
Class Hours & Classroom	Mon. 15:00-18:00 313-404				
Lecturer	CHA,EUI-YOUNG	Office	자연대 연구실험동 414호	Office Hours	언제던지
		Telephone	051-510-2219	E-mail	eycha@pnu.edu
Methodology of Instruction	lecture				
Evaluation and Grading	Mid-exam and Final-exam 60% Homework 30% Etc 10% * Students with disabilities can request an extension of the exam hour, and they can take exams by getting writing assistance or by using a computer.				
Prerequisites					
Course Objectives	- To learn and understand about the basic theory of the robotic vision. - To learn the method to apply robot vision to real-world problem.				
Course Description	- Terminolgy and concepts of image processing, pattern recognition, and computer vision - Basic theories of filter, mask, and so on - Advanced theories of image enhancement, edge detection, and target tracking for robot vision * Students with disabilities can negotiate with the Disabled Student's Academic Support Center regarding course materials and assignments.				
Textbooks and References					
Required Textbooks	Robot Vision ... Stefan Florczyk Wiley-VCH				
References					

Weekly Schedule of Classes		
Week No.	Course Material	Assignments and Other Notes
Week 1	[Orientation and Education on Academic Misbehavior(e.g. Cheating, Plagiarism) and Safety Education on Experiment and Practice] Introduction	
Week 2	Image Processing	Homework
Week 3	Navigation	Homework
Week 4	Vision Systems	Homework
Week 5	CAD	Homework
Week 6	Stereo Vision	Homework
Week 7	Camera Calibration	Homework
Week 8	Mid Examination	
Week 9	Self-learning Algorithms	Homework
Week10	OCR	Homework
Week11	Redundancy in Robot-vision Scenarios	Homework
Week12	Algorithm Evaluation of Robot-vision Systems for Autonomous Robots	Homework
Week13	Calibration for Autonomous Video-based Robot Systems	Homework
Week14	Redundant Robot-vision Program for CAD Modeling	Homework
Week15	Final Examination	
Week16		
Attachment		