



HANYANG UNIVERSITY

Hanyang International Summer School

Faculty Information	Name	Sungyong Baik				
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	Department	Department of Data Science				
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Course Information	Class No.	18059	Course Code	AIX0005	Credits	3
	Course Name	AI+X: Machine Learning				
	Lecture Schedule	Mon-Thu /9:00~12:00 AM				
	Course Description	This course will provide students with more in-depth materials on deep learning. In particular, students will learn different types of neural networks and how to train them. The course will also briefly introduce wide applications of deep learning, such as computer vision and natural language processing.				
	Course Objective	Objective: By the end of the course, students should be able to: <ul style="list-style-type: none"> - Understand the theories behind how neural networks works - Understand how to train deep learning models - Understand how the deep learning models can be used in real-world applications 				
	Prerequisite	<ul style="list-style-type: none"> - Statistics - Linear Algebra - Calculus - Programming 				
	Materials/Textbooks					
Evaluation	Attendance	10%	Quiz	%		
	Assignment	%	Mid-term Exam	40%		
	Presentation	%	Final Exam	40%		
	Group Project	%	Participation	10%		
	Etc.	Evaluation Item			Ratio	
				%		
				%		
Daily Lecture Plan	Week 1	Day 1	Opening Ceremony			
		Day 2	Introduction & Background			
		Day 3	Logistic Regression			
		Day 4	SVM Part 1			



	Week 2	Day 1	SVM Part 2
		Day 2	Optimization Part 1
		Day 3	Optimization Part 2
		Day 4	Optimization Part 3
	Week 3	Day 1	Neural Networks Part 1
		Day 2	Neural Networks Part 2
		Day 3	Convolutional Neural Networks Part 1
		Day 4	Convolutional Neural Networks Part 2
	Week 4	Day 1	Training Neural Networks
		Day 2	Visualizing & Understanding Neural Networks
		Day 3	Applications Part 1
		Day 4	Applications Part 2