

빅데이터 및 AI

과목OT

2023-2학기

Course Information

- Welcome to Big Data and AI (빅데이터및AI) class!
- Instructor: Sejoon Lim (임세준)
 - Office: 공학관 541호
 - Email: lim@kookmin.ac.kr
- Lecture
 - Tuesday/Thursday 10:30-11:45 공학관 508호
- Office Hour
 - Thursday 13:30-14:30 / 공학관 541호
- Text book
 - 교재: 파이썬으로 만드는 인공지능, 오일석 외, 한빛아카데미, 2023

Course Schedule

Lecture Week	Contents	Reading
Week 1	빅데이터 및 인공지능 개요	Chapter 01
Week 2	파이썬 환경 설정	Chapter 02
Week 3	기계학습과 인식	Chapter 03
Week 4	기계학습과 인식/인공신경망 기초	Chapter 03,04
Week 5	인공신경망 기초	Chapter 04
Week 6	딥러닝과 텐서플로우	Chapter 05
Week 7	딥러닝과 텐서플로우	Chapter 05
Week 8	Midterm Exam	
Week 9	CNN과 컴퓨터 비전	Chapter 06
Week 10	CNN과 컴퓨터 비전/시계열 데이터와 RNN	Chapter 06, 08
Week 11	시계열 데이터와 RNN	Chapter 08
Week 12	강화학습	Chapter 09
Week 13	강화학습	Chapter 09
Week 14	생성모델	Chapter 10
Week 15	Final Exam	

Class Policy

- Grading
 - Midterm Exam (30%),
 - Final Exam (35%),
 - Homework (10%),
 - Late homework will be given 50% penalty on grading.
 - Project(15%),
 - Attendance (10%)

Big data and AI

Volume - 양
Velocity - 속도
Variety - 다양성

데이터 수집 (2/27/23)

- **Big data** refers to extremely large and complex datasets that are too large to be effectively managed, processed, and analyzed using traditional data management and analysis tools.

- <https://www.youtube.com/watch?v=uD8Dbozzod4>
- <https://www.youtube.com/watch?v=wVAWAeOIIII>

- **Artificial intelligence (AI)** refers to the simulation of human intelligence in machines that are programmed to think and learn like humans. AI systems are designed to perform tasks that typically require human intelligence, such as understanding natural language, recognizing patterns, solving problems, and making decisions.

- [Artificial Intelligence In 5 Minutes | What Is Artificial Intelligence? | AI Explained | Simplilearn - YouTube](#)

데이터 분석 → 인공지능 (AI) - ML - 딥러닝

자연어
이해하기 위한
프로그램 언어
프로그래밍