COURSE DETAIL

DATA SCIENCE APPLICATION 4
Country Korea, South
Host Institution Korea University
Program(s) Korea University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 172
UCEAP Course Suffix
UCEAP Official Title DATA SCIENCE APPLICATION 4
UCEAP Transcript Title DATA SCI APPLCTN 4
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course cultivates a deep understanding of data augmentation techniques and robust machine learning principles and the ability to apply them to real-world problems.

Students will implement various data augmentation techniques using programming languages and machine learning libraries and develop problem-solving skills to diagnose and address the performance degradation caused by noisy labels and imbalanced data. Additionally, students will master the use of cross-validation and performance metrics to effectively evaluate models, and learn methods to interpret and explain model predictions, ensuring the development of transparent and trustworthy machine learning applications. The course also emphasizes the ethical aspects of data augmentation and robust machine learning, fostering the ability to implement ethical practices that ensure responsible use of technology. Students will nurture a research-oriented mindset and enhance their collaboration skills through team projects and group discussions, promoting the exchange of ideas.

Language(s) of Instruction
English

Host Institution Course Number
DATA412

Host Institution Course Title
DATA SCIENCE APPLICATION IV

Host Institution Course Details
https://infodepot.korea.ac.kr/lecture1/lecsubjectPlanView.jsp?year=2024&term=2R...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

Print