OPEN CYBER UNIVERSITY OF KOREA
Department of AI Convergence & Engeering
August 2024

Course Title:	Digital Healthcare
Credits:	None
Class Meetings:	Location: Online Hybrid(Prerecorded & Live)
	Hours/Days: TBD
Professor:	Professor Yuchae Jung / Ph.D.
	Proffessor Daeyup Yu / Ph.D Student, MBA
Office:	Department of AI Convergence & Engeering, Open Cyber
	University of Korea, 02087
Office hours:	10:00 am ~ 18:00 pm
Tel / E-mail:	Professor Jung : 82-2-2197-4163 /ycjung7@ocu.ac.kr
	Professor Daeyup Yu: 82-2-2197-4257 / cjyoo7@ocu.ac.kr

Course Description:

This course deals with a basic understanding of digital healthcare and various healthcare big data. It examines the types of healthcare big data (wearable device data, dielectric information, medical data, etc.) and examines convergence with artificial intelligence technology and market prospects.
It also examines regulations and solutions related to the healthcare industry.

Course Objectives:

1. It examines industrial trends in the digital healthcare field and the direction of development of the future healthcare industry.
2. We look at various types of healthcare big data and learn analysis cases applying artificial intelligence technology.
3. We consider healthcare industry-related regulations and ownership issues of patient-derived data.

Text Book: Download from ACU platform(provided)

Class Policies: NA

Attendance: Online platform

Examinations: Final examination

Class Schedule

Date	Contents	Assignment	Prof.	Teaching method
W 1 09/16	Orietation Class 1: Advances in Artificial Intelligence Technology Class 2: Artificial intelligence and machine learning Class 3: Categories of digital healthcare	-	Prof. Jung	Online Video Streaming
W 2 09/22	Class 1: Characteristics of Big Data Class 2: Use Cases of Big Data Class 3: Introduction of healthcare Big Data	-	Prof. Jung	Online Video Streaming
W 3 09/29	Class 1: Types of wearable devices Class 2: Types of bio-signals Class 3: Bio-signal analysis	-	Prof. Jung	Online Video Streaming
W 4 10/07	Class 1: Smartphone sensor Class 2: Smartphone and healthcare Class 3: Smartphone expansion	-	Prof. Jung	Online Video Streaming
W 5 10/14	Class 1: Customized medical care Class 2: Prediction *vs* prevention Class 3: Precision medicine	-	Prof. Jung	Online Video Streaming
W 6 10/21	Class 1: Healthcare Data Box Class 2: Digital phenotype Class 3: Normal database	-	Prof. Yu	Online Video Streaming
W 7 10/28	Class 1 : Introduction of telemedicine Class 2: Telemedicine cases	-	Prof. Yu	Online Video Streaming
W 8 11/04	Class 1: Status of teleconsultation Class 2: Various cases of teleconsultation	-	Prof. Yu	Online Video Streaming
W 9 11/11	Class 1: Concept of Digital Therapy Class 2: Classification of digital therapeutics	-	Prof. Yu	Online Video Streaming
W 10 11/18	Class 1: Introduction of Medical Artificial Intelligence Class 2: Medical Artificial Intelligence Business Model	-	Prof. Yu	Online Video Streaming
W 10 11/25	Final exam * Exam scope: Weeks 1-10, Number of questions: 20			Online Test