UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Artificial Intelligence in Healthcare

2526-3-H4102D066

Aims

Understand what Artificial Intelligence and Machine Learning are, what are their benefits and limits.

Understand the role of AI and its application in healthcare now and in the near future.

Contents

What is Artificial Intelligence and Machine Learning, especially supervised learning. Current state of Artificial Intelligence in healthcare and future developments.

Detailed program

- A BRIEF INTRODUCTION TO ARTIFICIAL INTELLIGENCE IN HEALTH CARE
- MYTHS ABOUT AI APPLICATIONS IN HEALTH CARE
- DEFINITION OF ARTIFICIAL INTELLIGENGE AND MACHINE LEARNING
- ARTIFICIAL INTELLIGENCE – BENEFITS & RISKS
- ARTIFICIAL INTELLIGENCE IN THE HEALTH SECTOR
- ARTIFICIAL INTELLIGENCE VERSUS HUMAN INTELLIGENCE
- FUTURE OF ARTIFICIAL INTELLIGENCE IN THE HEALTH SECTOR
- ARTIFICIAL INTELLIGENCE & NEURAL NETWORKS
- ETHICAL QUESTIONS FOR ARTIFICIAL INTELLIGENCE IN HEALTH CARE
- PRESENT STATE & FUTURE OF ARTIFICIAL INTELLIGENCE IN MAJOR HEALTHCARE SPECIALTIES

Prerequisites

Basic computer science knowledge

Teaching form

Classical lesson (to be delivered in the online mode if needed). The student will have to perform some searches on the Internet and small exercises on his PC. In case some students don't have a PC, we will use a computer lab.

Textbook and teaching resource

textbook: Artificial Intelligence in Healthcare di Dr Parag Suresh Mahajan MD
The teacher will provide some slides and notes.

Semester

Assessment method

Exercises to be finished in class + presentation of an article on AI application in medicine

Office hours

Sustainable Development Goals

INDUSTRY, INNOVATION AND INFRASTRUCTURE