Module 6 (extra Questions)

Explain three link prediction methods in pharmaceutical drug discoveries in detail (5)



Module 1

How can phenotyping algorithms contribute to personalized medicine, and what challenges might arise in utilizing EHR data for this purpose? Provide examples (10)

Discuss the barriers and challenges associated with the widespread adoption of Electronic Health Records (EHR) and propose potential solutions. (10)

Explain the significance of Electronic Health Records (EHR) in improving healthcare delivery, citing specific benefits and components of EHR. (10)

List the different components of electronic health record system (EHR) (5)

Module 2

Explain various biomedical imaging modalities and their applications in healthcare. Discuss the importance of image segmentation and registration in this context.(10)

Design a scenario where object detection in biomedical imaging plays a crucial role in early disease diagnosis. Describe the steps involved and potential challenges.(10)

Discuss the challenges inherent in analyzing genomic data for personalized medicine. How can this data be effectively utilized, and what ethical considerations should be taken into account? (10)

Explain various biomedical imaging modalities and their applications in healthcare. Discuss the importance of image segmentation and registration in this context. (10)

Examine the role of mining sensor data in healthcare. Provide examples of how this data can be leveraged to improve patient outcomes and healthcare processes. (10)