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Bioinformatics, Healthcare Informatics and Analytics: An Imperative for Improved Healthcare System

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Abstract

Healthcare Informatics focuses on health data, information and knowledge, including their collection, processing, analysis and use. Bioinformatics employ computational tools and techniques to study and analyse large biological databases and to absolutely understand disease and grasp the genetics and proteomics by relating them with healthcare data. The focus is on processing genomic and proteomics data for basic research in biology, but also medicine, drug discovery, and related areas. Analytics in healthcare came as a result of large healthcare data that are being gathered electronically. Data analytics is proficient in terms of healthcare improvement, reduction in cost and safety of lives. Applications of data analytics in healthcare is as a result of the eruption in data to mine understandings so as to make informed decisions. This paper reviews bioinformatics, Healthcare Informatics and Analytics as an imperative for an improved Healthcare System. It looks at the benefits, the contribution of each of them to improving healthcare system, the overlap among bioinformatics, healthcare Informatics and analytics and finally the future prospects of healthcare informatics and analytics.

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Keywords

Healthcare Informatics, Bioinformatics, Analytics, Healthcare System

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